STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION



DIVISION 2 – BRIDGE MAINTENANCE

CONTRACT PROPOSAL

WBS ELEMENT: Various ROUTE: Various

COUNTIES: Beaufort, Carteret, Craven, Greene, Jones,

Lenoir, Pamlico, Pitt

DESCRIPTION: Replacement/Repair of Bridge Expansion Joints

And Foam Injections at Various Bridge Sites

PRE-BID CONFERENCE: Tuesday, March 2, 2010 at 11:00 AM BID OPENING: Tuesday, March 9, 2010 at 10:00 AM

NOTICE:

ALL BIDDERS SHALL COMPLY WITH ALL APPLICABLE LAWS REGULATING THE PRACTICE OF GENERAL CONTRACTING AS CONTAINED IN CHAPTER 87 OF THE GENERAL STATUTES OF NORTH CAROLINA WHICH REQUIRES THE BIDDER TO BE LICENSED BY THE N.C. LICENSING BOARD FOR CONTRACTORS WHEN BIDDING ON ANY NON-FEDERAL AID PROJECT WHERE THE BID IS \$30,000 OR MORE, EXCEPT FOR CERTAIN SPECIALTY WORK AS DETERMINED BY THE LICENSING BOARD OR SBE PROJECT. BIDDERS SHALL ALSO COMPLY WITH ALL OTHER APPLICABLE LAWS REGULATING THE PRACTICES OF ELECTRICAL, PLUMBING, HEATING AND AIR CONDITIONING AND REFRIGERATION CONTRACTING AS CONTAINED IN CHAPTER 87 OF THE GENERAL STATUTES OF NORTH CAROLINA. NOT WITHSTANDING THESE LIMITATIONS ON BIDDING, THE BIDDER WHO IS AWARDED ANY PROJECT SHALL COMPLY WITH CHAPTER 87 OF THE GENERAL STATUTES OF NORTH CAROLINA FOR LICENSING REQUIREMENTS WITHIN 60 CALENDAR DAYS OF BID OPENING, REGARDLESS OF FUNDING SOURCES.

NAME OF BIDDER

N.C. CONTRACTOR'S LICENSE NUMBER

ADDRESS OF BIDDER

RETURN BIDS TO:

N. C. DEPARTMENT OF TRANSPORTATION Attn: Aaron Bullard, PE 105 Pactolus Highway P O Box 1587 Greenville, NC 27835-1587

Per items 11 - 13 of the instructions on page 2

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INSTRUCTIONS TO BIDDERS

PLEASE READ ALL INSTRUCTIONS CAREFULLY BEFORE PREPARING AND SUBMITTING YOUR BID.

All bids shall be prepared and submitted in accordance with the following requirements. Failure to comply with any requirement shall cause the bid to be considered irregular and shall be grounds for rejection of the bid.

- The bid form furnished by NCDOT with the proposal shall be used and shall not be altered in any manner. DO NOT SEPARATE THE BID FORM FROM THE PROPOSAL!
- 2. All entries on the bid form, including signatures, shall be written in ink.
- 3. The Bidder shall submit a unit price for every item on the bid form. The unit prices for the various contract items shall be written in figures. Unit prices shall be limited to two (2) decimal places.
- 4. An amount bid shall be entered on the bid form for every item. The amount bid for each item shall be determined by multiplying each unit bid by the quantity for that item, and shall be written in figures in the "Amount Bid" column of the form.
- 5. The total amount bid shall be written in figures in the proper place on the bid form. The total amount shall be determined by adding the amounts bid for each item.
- **6.** Changes in any entry shall be made by marking through the entry in ink and making the correct entry adjacent thereto in ink. A representative of the Bidder shall initial the change in ink.
- 7. The bid shall be properly executed. All bids shall show the following information:
 - a. Name of individual, firm, corporation, partnership, or joint venture submitting bid.
 - b. Name and signature of individual or representative submitting bid and position or title.
 - c. Name, signature, and position or title of witness.
 - d. Federal Identification Number (or Social Security Number of Individual)
 - e. Contractor's License Number (if Applicable)
- **8.** Bids submitted by corporations shall bear the seal of the corporation.
- **9.** The bid shall not contain any unauthorized additions, deletions, or conditional bids.
- 10. The bidder shall not add any provision reserving the right to accept or reject an award, or to enter into a contract pursuant to an award.
- 11. THE PROPOSAL WITH THE BID FORM STILL ATTACHED SHALL BE PLACED IN A SEALED ENVELOPE AND SHALL HAVE BEEN DELIVERED TO AND RECEIVED IN THE DIVISION TWO ENGINEER'S OFFICE AT 105 PACTOLUS HIGHWAY, GREENVILLE, NC 27834 BY 10:00 AM ON TUESDAY, MARCH 9, 2010.
- **12.** The sealed bid must display the following statement on the front of the sealed envelope:

ATTN: AARON BULLARD, PE QUOTATION FOR REPLACEMENT/REPAIR OF BRIDGE DECK EXPANSION JOINTS TO BE OPENED AT 10:00 AM, TUESDAY, MARCH 9, 2010.

13. If delivered by mail, the sealed envelope shall be placed in another sealed envelope and the outer envelope shall be addressed as follows:

NC DEPARTMENT OF TRANSPORTATION ATTN: AARON BULLARD, PE PO BOX 1587 GREENVILLE, NC 27835-1587

AWARD OF CONTRACT

The award of the contract, if it be awarded, will be made to the lowest responsible Bidder in accordance with Section 102 (excluding 102-2 and 102-11) of the Standard Specifications for Roads and Structures 2006. The lowest responsible will be notified that his bid has been accepted and that he has been awarded the contract. NCDOT reserves the right to reject all bids.

<u>DIVISION CONTRACT</u> PROJECT SPECIAL PROVISIONS - GENERAL

SCOPE OF WORK:

This contract is for repairing or replacing bridge deck expansion joints and installing foam injections at various bridge sites in Beaufort, Carteret, Craven, Greene, Jones, Lenoir, Pamlico and Pitt Counties.

All work and materials shall be in accordance with the provisions of the General Guidelines of this contract, the Project Special Provisions, the North Carolina Department of *Transportation Standard Specifications for Roads and Structures, July 2006*, the North Carolina Department of Transportation *Roadway Standard Drawings, July 2006*, and the current edition of the *Manual of Uniform Traffic Control Devices* (MUTCD).

The contractor shall be responsible for fulfilling all requirements of the NCDOT *Standard Specifications* for *Roads and Structures* dated July 2006, except as otherwise specified herein.

MANDATORY PRE-BID CONFERENCE:

In order to bid on this contract, all prospective bidders must attend the Pre-Bid Conference to be held on Tuesday, March 2, 2010 at 11:00 AM at the Division 2 Bridge Maintenance Engineer's Office located at 255 South Glenburnie Road, New Bern. This meeting will begin promptly at 11:00 AM. Prospective bidders arriving after the 11:00 AM starting time will not be allowed to bid. The Conference will be conducted by Department personnel for the purpose of providing additional information about the project and to give all bidders an opportunity to ask any questions they may have. Only bids received from the bidders who have attended and properly registered at the Pre-Bid Conference will be considered.

Attendance at the Pre-Bid Conference will not meet the requirements of proper registration unless the individual attending has registered with the following information:

- 1. The individual writes his/her name on the official roster.
- 2. The individual writes in the name and address of the company he/she represents.
- 3. Only one company is shown as being represented by the individual attending.
- 4. The individual is an officer or permanent employee of the firm they represent.

PURCHASE ORDER CONTRACT PREQUALIFICATION:

Beginning **July 1, 2009**, any firm that wishes to perform work on Division Purchase Order Contracts as either the prime contractor or as a subcontractor on the project must be prequalified for the type of work they wish to perform. Firms that wish to bid on these projects as the prime contractor must be prequalified <u>prior to submitting a bid</u>. Firms that wish to perform as a subcontractor to the prime contractor must be prequalified <u>prior to beginning work on the project</u>.

For the purposes of prequalification, any firm that is currently prequalified as a prime or a subcontractor on central let projects for the appropriate work codes is considered eligible to work and/or bid on Purchase Order Contracts as long as other items such as bonding and license requirements for the contract are met.

Information regarding the requirements to become prequalified as a Purchase Order Contract contractor, including the application to become prequalified if you are not already prequalified, can be found at the following website: http://www.ncdot.org/business/howtogetstarted/.

CONTRACT TIME:

The date of availability for this contract is the date the purchase order is issued.

This is a **one-year contract**, which will expire 364 calendar days following the date of availability.

The Contractor shall submit a bid for one (1) year. At the option of the Department, this contract may be extended for two (2) additional periods of one (1) year each for a maximum period of three (3) years total. If the contract is extended, the unit bid prices will be increased by three (3) percent for each one (1) year extension. No changes in the terms, conditions, etc. of this contract will be made when an extension to the contract is implemented. The Engineer will notify the Contractor in writing no later than 15 calendar days prior to the contract expiration if the contract is to be extended. The Contractor must notify the Engineer in writing within 15 calendar days of his acceptance or rejection of this offer. Failure on the part of the Contractor to reply will be considered as a rejection of contract extension.

INTERMEDIATE CONTRACT TIME NUMBER 1 AND LIQUIDATED DAMAGES (2-20-07)

SP1 G14 B

The Contractor shall not narrow or close a lane of traffic on affected roads, detain and /or alter the traffic flow on or during holiday weekends, special events, or any other time when traffic is unusually heavy, including the following schedules:

HOLIDAY AND HOLIDAY WEEKEND LANE CLOSURE RESTRICTIONS

- 1. For **unexpected occurrence** that creates unusually high traffic volumes, as directed by the Engineer.
- 2. For **New Year's Day**, between the hours of 4:00 p.m. December 31st and 8:00 a.m. January 2nd. If New Year's Day is on a Friday, Saturday, Sunday or Monday, then until 8:00 a.m. the following Tuesday.
- 3. For **Easter**, between the hours of 4:00 p.m. Thursday and 8:00 a.m. Monday.
- 4. For **Memorial Day**, between the hours of 4:00 p.m. Friday and 8:00 a.m. Tuesday.
- 5. For **Independence Day**, between the hours of 4:00 p.m. the day before Independence Day and 8:00 a.m. the day after Independence Day.
 - If **Independence Day** is on a Friday, Saturday, Sunday or Monday, then between the hours of 4:00 p.m. the Thursday before Independence Day and 8:00 a.m. the Tuesday after Independence Day.
- 6. For **Labor Day**, between the hours of 4:00 p.m. Friday and 8:00 a.m. Tuesday.
- 7. For **Thanksgiving Day**, between the hours of 4:00 p.m. Tuesday and 8:00 a.m. Monday.
- 8. For **Christmas**, between the hours of 4:00 p.m. the Friday before the week of Christmas Day and 8:00 a.m. the following Tuesday after the week of Christmas Day.

Holidays and holiday weekends shall include New Year's, Easter, Memorial Day, Independence Day, Labor Day, Thanksgiving, and Christmas. The Contractor shall schedule his work so that lane closures are not required during these periods, unless otherwise directed by the Engineer.

The time of availability for this intermediate contract work shall be the time the Contractor begins to install all traffic control devices for lane closures according to the time restrictions listed herein.

The completion time for this intermediate contract work shall be the time the Contractor is required to complete the removal of all traffic control devices for lane closures according to the time restrictions stated herein and place traffic in the pre-existing traffic pattern.

The liquidated damages are **Five Hundred Dollars** (\$500.00) per hour.

SITE INVESTIGATION AND REPRESENTATION:

The Contractor acknowledges that he has satisfied himself as to the nature of the work, and general and local conditions; particularly those bearing on transportation, availability of labor, State Regulations for safety and security of property, roads, and facilities required for the prosecution of the work, and all matters which can in any way affect the work, or cost thereof, under this contract. Any failure by the Contractor to acquaint himself with all the available information concerning these conditions will not relieve him from the responsibility for estimating properly the difficulty or cost of successfully performing the work.

NO MAJOR CONTRACT ITEMS:

(2-19-02) (Rev 8-21-07)

SP1 G31

None of the items included in this contract will be major items.

NO SPECIALTY ITEMS:

(7-1-95)

SP1 G34

None of the items included in this contract will be specialty items (See Article 108-6 of the *Standard Specifications*).

MINORITY BUSINESS ENTERPRISE AND WOMEN BUSINESS ENTERPRISE: (PO & MUNICIPALITIES)

(10-16-07) (10-20-09)

SP1G68

Policy

It is the policy of the North Carolina Department of Transportation that Minority Business Enterprises (MBEs) and Women Business Enterprises (WBEs) as defined in *GS 136-28.4* shall have the equal opportunity to compete fairly for and to participate in the performance of contracts financed in whole or in part by State Funds.

Obligation

The Contractor, subcontractor, and sub-recipient shall not discriminate on the basis of race, religion, color, creed, national origin, sex, handicapping condition or age in the performance of this contract. The Contractor shall comply with applicable requirements of *GS 136-28.4* in the award and administration of state funded contracts. Failure by the Contractor to comply with these requirements is a material breach

of this contract, which may result in the termination of this contract or such other remedy, as the Department deems necessary.

Definitions

Commitment - The approved MBE/WBE participation submitted by the prime contractor during the bidding process.

Committed MBE/WBE - Any MBE/WBE listed on the MBE/WBE commitment list approved by the Department at the time of bid submission or any MBE/WBE utilized as a replacement for a MBE/WBE firm listed on the commitment list.

Department (DOT)- North Carolina Department of Transportation (See Municipality)

Municipality – The entity letting the contract, when this provision refers to the Department or DOT, it shall mean the municipality, if applicable.

Minority Business Enterprise (MBE) – A firm certified as a Disadvantaged Minority-Owned Business Enterprise through the North Carolina Unified Certification Program.

Women Business Enterprise (WBE) – A firm certified as a Disadvantaged Women-Owned Business Enterprise through the North Carolina Unified Certification Program.

MBE/WBE – This term is used for convenience only. Minority Business Enterprise and Women Business Enterprise are not interchangeable terms and the goals for either or both are not interchangeable.

Goal - The MBE/WBE participation specified herein

Letter of Intent – Written documentation of the bidder/offeror's commitment to use a MBE/WBE subcontractor and confirmation from the MBE/WBE that it is participating in the contract.

Manufacturer - A firm that operates or maintains a factory or establishment that produces on the premises the materials or supplies obtained by the Contractor.

Regular Dealer - A firm that owns, operates, or maintains a store, warehouse, or other establishment in which the materials or supplies required for the performance of the contract are bought, kept in stock, and regularly sold to the public in the usual course of business. A regular dealer engages in, as its principal business and in its own name, the purchase and sale or lease of the products in question. A regular dealer in such bulk items as steel, cement, gravel, stone, and petroleum products need not keep such products in stock, if it owns or operates distribution equipment. Brokers and packagers are not regarded as manufacturers or regular dealers within the meaning of this section.

Form RS-1-D - Form for subcontracts involving MBE/WBE subcontractors attesting to the agreed upon unit prices and extensions for the affected contract items.

North Carolina Unified Certification Program - A program that provides comprehensive information to applicants for certification, such that an applicant is required to apply only once for a MBE/WBE certification that will be honored by all recipients of USDOT funds in the state and not limited to the Department of Transportation only. The Certification Program is in accordance with 49 CFR Part 26.

Standard Specifications – The general term comprising all directions, provisions, and requirements contained or referred to in the North Carolina Department of Transportation Standard Specifications for Roads and Structures and any subsequent revisions or additions to such book that are issued under the title Supplemental Specifications.

Contract Goal

The following goals for participation by Minority Business Enterprises and Women Business Enterprises are established for this contract.

(A) Minority Business Enterprises 0 %

- (1) If the goal is more than zero, the Contractor shall exercise all necessary and reasonable steps to ensure that Minority Business Enterprises participate in at least the percent of the contract as set forth above as the goal.
- (2) If the goal is zero, the Contractor shall continue to recruit the MBEs and report the use of MBEs during the construction of the project. A good faith effort will not be required with a zero goal.

(B) Women Business Enterprises 0 %

- (1) If the goal is more than zero, the Contractor shall exercise all necessary and reasonable steps to ensure that Women Business Enterprises participate in at least the percent of the contract as set forth above as the goal.
- (2) If the goal is zero, the Contractor shall continue to recruit the WBEs and report the use of WBEs during the construction of the project. A good faith effort will not be required with a zero goal.

Contract Requirement

The approved MBE/WBE participation submitted by the Contractor shall be the Contract Requirement.

Certified Transportation Firms Directory

Real-time information about firms doing business with the Department and firms that are certified through North Carolina's Unified Certification Program is available in the Directory of Transportation Firms. The Directory can be accessed by the link on the Department's homepage or by entering https://apps.dot.state.nc.us/vendor/directory in the address bar of your web browser. Only firms identified as MBE/WBE certified in the Directory can be utilized to meet the contract goals.

The listing of an individual firm in the Department's directory shall not be construed as an endorsement of the firm's capability to perform certain work.

Listing of MBE/WBE Subcontractors in Contract

Only those MBE/WBE firms with current certification are acceptable for listing in the bidder's submittal of MBE/WBE participation. The Contractor shall indicate the following required information:

(A) If the goal is more than zero bidders, at the time the bid proposal is submitted, shall submit a listing of MBE/WBE participation on the appropriate form (or facsimile thereof) contained

elsewhere in the contract documents in order for the bid to be considered responsive. Bidders shall indicate the total dollar value of the MBE/WBE participation for the contract. If the bidder has no MBE/WBE participation, he shall indicate this on the form "Listing of MBE/WBE Subcontractors" by entering the word or number zero. This form shall be completed in its entirety. Blank forms will not be deemed to represent zero participation. Bids submitted that do not have WBE/MBE participation indicated on the appropriate form will not be read publicly during the opening of bids. The Department will not consider these bids for award and the proposal will be returned to the bidder.

(B) If the goal is zero, bidders at the time the bid proposal is submitted, shall enter the word "zero" or number "0" or if there is participation, add the value on the "Listing of MBE/WBE Subcontractors" (or facsimile thereof) contained elsewhere in the contract documents.

Written Documentation - Letter of Intent

The bidder shall submit written documentation of the bidder/offeror's commitment to use MBE/WBE subcontractors whose participation it submits to meet a contract goal and written confirmation from each MBE/WBE, listed in the proposal, indicating their participation in the contract. This documentation shall be submitted on the Department's form titled "Letter of Intent to Perform as Subcontractor". This letter of intent form is available at: http://www.ncdot.org/doh/preconstruct/ps/contracts/letterofintent.pdf. It shall be received in the office of the Division Contract Officer no later than 12:00 p.m. of the sixth calendar day following opening of bids.

If the bidder fails to submit the letter of intent from each committed MBE/WBE listed in the proposal indicating their participation in the contract, the MBE/WBE participation will not count toward meeting the goal.

Counting MBE/WBE Participation Toward Meeting MBE/WBE Goal of Zero or More

- (A) If a firm is determined to be an eligible MBE/WBE firm, the total dollar value of the participation by the MBE/WBE will be counted toward the contract requirement. The total dollar value of participation by a certified MBE/WBE will be based upon the value of work actually performed by the MBE/WBE and the actual payments to MBE/WBE firms by the Contractor.
- (B) When a MBE/WBE performs as a participant in a joint venture, the Contractor may count toward its MBE/WBE goal a portion of the total value of participation with the MBE/WBE in the joint venture, that portion of the total dollar value being a distinct clearly defined portion of work that the MBE/WBE performs with its forces.
- (C) The Contractor may count toward its MBE/WBE goal only expenditures to MBE/WBEs that perform a commercially useful function in the work of a contract. A MBE/WBE performs a commercially useful function when it is responsible for execution of the work of the contract and is carrying out its responsibilities by actually performing, managing, and supervising the work involved. To perform a commercially useful function, the MBE/WBE shall also be responsible with respect to materials and supplies used on the contract, for negotiating price, determining quality and quantity, ordering the material and installing (where applicable) and paying for the material itself. To determine whether a MBE/WBE is performing a commercially useful function, the Department will evaluate the amount of work subcontracted, industry practices, whether the amount the firm is to be paid under the contract is commensurate with the work it is actually

performing and the MBE/WBE credit claimed for its performance of the work, and other relevant factors.

- (2) A MBE/WBE may enter into subcontracts. Work that a MBE/WBE subcontracts to another MBE/WBE firm may be counted toward the contract goal. Work that a MBE/WBE subcontracts to a non-MBE/WBE firm does not count toward the contract goal. If a MBE/WBE contractor or subcontractor subcontracts a significantly greater portion of the work of the contract than would be expected on the basis of standard industry practices, the MBE/WBE shall be presumed not to be performing a commercially useful function. The MBE/WBE may present evidence to rebut this presumption to the Department for commercially useful functions. The Department's decision on the rebuttal of this presumption will be final.
- (3) The following factors will be used to determine if a MBE/WBE trucking firm is performing a commercially useful function.
 - (a) The MBE/WBE shall be responsible for the management and supervision of the entire trucking operation for which it is responsible on a particular contract, and there shall not be a contrived arrangement for the purpose of meeting MBE/WBE goals.
 - (b) The MBE/WBE shall itself own and operate at least one fully licensed, insured, and operational truck used on the contract.
 - (c) The MBE/WBE receives credit for the total value of the transportation services it provides on the contract using trucks it owns, insures, and operates using drivers it employs.
 - (d) The MBE/WBE may lease trucks from another MBE/WBE firm, including an owner-operator who is certified as a MBE/WBE. The MBE/WBE who leases trucks from another MBE/WBE receives credit for the total value of the transportation services the lessee MBE/WBE provides on the contract.
 - (e) The MBE/WBE may also lease trucks from a non-MBE/WBE firm, including from an owner-operator. The MBE/WBE who leases trucks from a non-MBE/WBE is entitled to credit for the total value of transportation services provided by non-MBE/WBE lessees not to exceed the value of transportation services provided by MBE/WBE-owned trucks on the contract. Additional participation by non-MBE/WBE lessees receives credit only for the fee or commission it receives as a result of the lease arrangement. The value of services performed under lease agreements between the MBE/WBE and Contractor will not count towards the contract requirement.
 - (f) For purposes of this paragraph, a lease shall indicate that the MBE/WBE has exclusive use of and control over the truck. This does not preclude the leased truck from working for others during the term of the lease with the consent of the MBE/WBE, so long as the lease gives the MBE/WBE absolute priority for use of the leased truck. Leased trucks shall display the name and identification number of the MBE/WBE.

- (D) A contractor may count toward its MBE/WBE goals 60 percent of its expenditures for materials and supplies required to complete the contract and obtained from MBE/WBE regular dealer and 100 percent of such expenditures to a MBE/WBE manufacturer.
- (E) A contractor may count toward its MBE/WBE goals the following expenditures to MBE/WBE firms that are not manufacturers or regular dealers:
 - (1) The fees or commissions charged by a MBE/WBE firm for providing a bona fide service, such as professional, technical, consultant, or managerial services, or for providing bonds or insurance specifically required for the performance of a DOT-assisted contract, provided the fees or commissions are determined to be reasonable and not excessive as compared with fees and commissions customarily allowed for similar services.
 - (2) The fees or commissions charged for assistance in the procurement of the materials and supplies, or for transportation charges for the delivery of materials or supplies required on a job site (but not the cost of the materials and supplies themselves), provided the fees are not from a manufacturer or regular dealer and provided the fees are determined to be reasonable and not excessive as compared with fees customarily allowed for similar services.

Good Faith Effort for Projects with Goals more than Zero

If the MBE/WBE participation submitted in the bid by the apparent lowest responsive bidder does not meet or exceed the MBE/WBE contract goals, the apparent lowest responsive bidder shall submit to the Division Contract Officer documentation of its good faith efforts made to reach each contract goal. One complete set and 9 copies of this information shall be received in the office of the Division Contract Officer no later than 12:00 p.m. of the sixth calendar day following opening of bids. Where the information submitted includes repetitious solicitation letters it will be acceptable to submit a representative letter along with a distribution list of the firms that were solicited. Documentation of MBE/WBE quotations shall be a part of the good faith effort submittal as necessary to demonstrate compliance with the factors listed below which the Department considers in judging good faith efforts. This documentation may include written subcontractor quotations, telephone log notations of verbal quotations, or other types of quotation documentation.

The following factors will be used to determine if the bidder has made adequate good faith effort:

- (A Whether the bidder attended any pre-bid meetings that were scheduled by the Department to inform MBE/WBEs of subcontracting opportunities.
- (B) Whether the bidder provided solicitations through all reasonable and available means (e.g. advertising in newspapers owned and targeted to the MBE/WBEs at least 10 calendar days prior to bid opening). Whether the bidder provided written notice to all MBE/WBEs listed in the NCDOT Directory of Transportation Firms, within the Divisions and surrounding Divisions where the project is located, that specialize in the areas of work (as noted in the MBE/WBE Directory) that the bidder will be subletting.
- (C) Whether the bidder followed up initial solicitations of interests by contacting MBE/WBEs to determine with certainty whether they were interested. If a reasonable amount of MBE/WBEs within the targeted Divisions do not provide an intent to quote or no MBE/WBEs specialize in the subcontracted areas, the bidder shall notify MBE/WBEs outside of the targeted Divisions that

specialize in the subcontracted areas, and call the Director of Business and Opportunity Workforce Development to give notification of the bidder's inability to get MBE/WBE quotes.

- (D) Whether the bidder selected portions of the work to be performed by MBE/WBEs in order to increase the likelihood of meeting the contract goals. This includes, where appropriate, breaking out contract work items into economically feasible units to facilitate MBE/WBE participation, even when the bidder might otherwise perform these work items with its own forces.
- (E) Whether the bidder provided interested MBE/WBEs with adequate and timely information about the plans, specifications and requirements of the contract.
- (F) Whether the bidder negotiated in good faith with interested MBE/WBEs without rejecting them as unqualified without sound reasons based on a thorough investigation of their capabilities. Any rejection should be noted in writing with a description as to why an agreement could not be reached.
- (G) Whether quotations were received from interested MBE/WBE firms but rejected as unacceptable without sound reasons why the quotations were considered unacceptable.
- (H) Whether the bidder specifically negotiated with subcontractors to assume part of the responsibility to meet the contract MBE/WBE goals when the work to be sublet includes potential for MBE/WBE participation.
- (I) Whether the bidder made any efforts and/or offered assistance to interested MBE/WBEs in obtaining the necessary equipment, supplies, materials, insurance, and/or bonding to satisfy the work requirements in the bid proposal.
- (J) Any other evidence that the bidder submits which show that the bidder has made reasonable good faith efforts to meet the contract goal.

If a bidder is the apparent lowest responsive bidder on more than one project within the same letting located in the same geographic area of the state, as a part of the good faith effort the Department will consider allowing the bidder to combine the MBE participation as long as the MBE overall goal value of the combined projects is achieved.

If a bidder is the apparent lowest responsive bidder on more than one project within the same letting located in the same geographic area of the state, as a part of the good faith effort the Department will consider allowing the bidder to combine the WBE participation as long as the WBE overall goal value of the combined projects is achieved.

If the Department does not award the contract to the apparent lowest responsive bidder, the Department reserves the right to award the contract to the next lowest responsive bidder that can satisfy the Department that the contract goal can be met or that adequate good faith efforts have been made to meet the goal.

MBE/WBE Replacement

The Contractor shall not terminate a committed MBE/WBE subcontractor for convenience or perform the work with its own forces or those of an affiliate. If the Contractor fails to demonstrate reasonable efforts to replace a committed MBE/WBE firm that does not perform as intended with another committed

MBE/WBE firm or completes the work with its own forces without the Engineer's approval, the Contractor may be disqualified from further bidding for a period of up to 6 months.

The Contractor shall comply with the following for replacement of committed MBE/WBE.

(A) Performance Related Replacement

When a MBE/WBE is terminated or fails to complete its work on the contract for any reason, the Contractor shall take all necessary, reasonable steps to replace the MBE/WBE subcontractor with another MBE/WBE subcontractor to perform at least the same amount of work as the MBE/WBE that was terminated. The Contractor is encouraged to first attempt to find another MBE/WBE firm to do the same work as the MBE/WBE that was being terminated.

To demonstrate necessary, reasonable good faith efforts, the Contractor shall document the steps they have taken to replace any MBE/WBE subcontractor who is unable to perform successfully with another MBE/WBE subcontractor. Such documentation shall include but not be limited to the following:

- (1) Copies of written notification to MBE/WBEs that their interest is solicited in subcontracting the work defaulted by the previous MBE/WBE subcontractor or in subcontracting other items of work in the contract.
- (2) Efforts to negotiate with MBE/WBEs for specific subbids including, at a minimum:
 - (a) The names, addresses, and telephone numbers of MBE/WBEs who were contacted.
 - (b) A description of the information provided to MBE/WBEs regarding the plans and specifications for portions of the work to be performed.
- (3) For each MBE/WBE contacted but rejected as unqualified, the reasons for the Contractor's conclusion.
- (4) Efforts made to assist the MBE/WBEs contacted, if needed, in obtaining bonding or insurance required by the Contractor.

(B) Decertification Replacement

- (1) When a committed MBE/WBE is decertified by the after a Request for Subcontract has been received by the Department, the Department will not require the Prime Contractor to solicit replacement MBE/WBE participation equal to the remaining work to be performed by the decertified firm. The participation equal to the remaining work performed by the decertified firm will count toward the contract requirement.
- (2) When a committed MBE/WBE is decertified prior to the Department receiving a Request for Subcontract for the named MBE/WBE firm, the Prime Contractor shall take all necessary and reasonable steps to replace the MBE/WBE subcontractor with another MBE/WBE subcontractor to perform at least the same amount of work to meet the contract goal or demonstrate that it has made a good faith effort to do so.

Changes in the Work

When the Engineer makes changes that result in the reduction or elimination of work to be performed by a committed MBE/WBE, the Contractor will not be required to seek additional participation. When the Engineer makes changes that result in additional work to be performed by a MBE/WBE based upon the Contractor's commitment, the MBE/WBE shall participate in additional work to the same extent as the MBE/WBE participated in the original contract work.

When the Engineer makes changes that result in extra work, which has more than a minimal impact on the contract amount, the Contractor shall seek additional participation by MBE/WBEs unless otherwise approved by the Engineer.

When the Engineer makes changes that result in an alteration of plans or details of construction and a portion or all of work had been expected to be performed by a committed MBE/WBE, the Contractor shall seek participation by MBE/WBEs unless otherwise approved by the Engineer.

When the Contractor requests changes in the work that result in the reduction or elimination of work that the Contractor committed to be performed by a MBE/WBE, the Contractor shall seek additional participation by MBE/WBEs equal to the reduced MBE/WBE participation caused by the changes.

Reports

All requests for subcontracts involving MBE/WBE subcontractors shall be accompanied by a certification executed by both the Prime Contractor and the MBE/WBE subcontractor attesting to the agreed upon unit prices and extensions for the affected contract items. This information shall be submitted on the Department Form RS-1-D, located at: http://www.ncdot.org/doh/forms/files/FORMRS-1-D.doc unless otherwise approved by the Engineer. The Department reserves the right to require copies of actual subcontract agreements involving MBE/WBE subcontractors.

Within 30 calendar days of entering an agreement with a MBE/WBE for materials, supplies or services, not otherwise documented by a Request for Subcontract as specified above, the Contractor shall furnish the Engineer a copy of the agreement. The documentation should also indicate the percentage (60% or 100%) of expenditures claimed for MBE/WBE credit.

All certifications will be considered a part of the project records, and consequently will be subject to penalties under State Law associated with falsifications of records related to projects.

Commitment

MBE/WBE firms submitted with the Letter of Intent to participate in the work shall be used unless otherwise approved by the Department. Provisions for replacement of MBE/WBE firms are included in this provision.

Reporting MBE/WBE Participation

- (A) The Contractor shall provide the Engineer with an accounting of payments made to MBE/WBE firms, including material suppliers, contractors at all levels (prime, subcontractor, or second tier subcontractor). This accounting shall be furnished to the Engineer for any given month by the end of the following month. Failure to submit this information accordingly may result in the following action:
 - (1) Withholding of money due in the next partial pay estimate; or

- (2) Removal of an approved contractor from the prequalified bidders list or the removal of other entities from the approved subcontractors list.
- (B) The Contractor shall report the accounting of payments on the Department's MBE/WBE Subcontractor Payment Information Form DBE-IS, which is available at http://www.ncdot.org/doh/forms/files/DBE-IS.xls. This shall be reported to the Engineer.
- (C) Contractors reporting transportation services provided by non-MBE/WBE lesses shall evaluate the value of services provided during the month of the reporting period only.

Prior to payment of the final estimate, the Contractor shall furnish an accounting of total payment to each MBE/WBE. A responsible fiscal officer of the payee contractor, subcontractor, or second tier subcontractor who can attest to the date and amounts of the payments shall certify that the accounting is correct.

While each contractor (prime, subcontractor, 2nd tier subcontractor) is responsible for accurate accounting of payments to MBE/WBEs, it shall be the prime contractor's responsibility to report all monthly and final payment information in the correct reporting manner.

Because NCDOT funding is being used to fund this project, failure on the part of the Contractor to submit the required information in the time frame specified may result in the disqualification of that contractor and any affiliate companies from further bidding on any NCDOT funded projects until the required information is submitted.

Because NCDOT funding is being used to fund this project, failure on the part of any subcontractor to submit the required information in the time frame specified may result in the disqualification of that contractor and any affiliate companies from further working on any State or Federally funded projects until the required information is submitted.

Failure to Meet Contract Requirements

Failure to meet contract requirements in accordance with Article 102-16(J) of the *Standard Specifications* may be cause to disqualify the Contractor.

LIABILITY INSURANCE:

(11-18-08) SP1 G80

Page 1-68, Article 107-16 is amended to include the following as the first, second, third and fourth paragraphs:

The Contractor shall be liable for any losses resulting from a breach of the terms of this contract. The Contractor shall be liable for any losses due to the negligence or willful misconduct of its agents, assigns and employees including any sub-contractors which causes damage to others for which the Department is found liable under the Torts Claims Act, or in the General Courts of Justice, provided the Department provides prompt notice to the Contractor and that the Contractor has an opportunity to defend against such claims. The Contractor shall not be responsible for punitive damages.

The Contractor shall at its sole cost and expense obtain and furnish to the Department an original standard ACORD form certificate of insurance evidencing commercial general liability with a limit for bodily injury and property damage in the amount of \$5,000,000.00 per occurrence and general aggregate, covering the Contractor from claims or damages for bodily injury, personal injury, or for property damages which may arise from operating under the contract by the employees and agents of the

Contractor. The required limit of insurance may be obtained by a single general liability policy or the combination of a general liability and excess liability or umbrella policy. The State of North Carolina shall be named as an additional insured on this commercial general liability policy. The policy may contain the following language as relates to the State as an additional insured: "This insurance with respect to the additional insured applies only to the extent that the additional insured is held liable for your or your agent's acts or omissions arising out of and in the course of operations performed for the additional insured."

The Contractor shall maintain all legally required insurance coverage, including without limitation, worker's compensation and vehicle liability, in the amounts required by law. Providing and maintaining adequate insurance coverage is a material obligation of the contractor and is of the essence of this contract. All such insurance shall meet all laws of the State of North Carolina. Such insurance coverage shall be obtained from companies that are authorized to provide such coverage and that are authorized by the Commissioner of Insurance to do business in North Carolina. The Contractor shall at all times comply with the terms of such insurance policies.

Upon execution of the contract, provide evidence of the above insurance requirements to the Engineer.

BIDS:

In accordance with GS 136-28.1(b), if the total bid amount of the contract exceeds \$1,200,000.00, the bid will not be considered for award.

CONTRACT PAYMENT AND PERFORMANCE BOND:

A performance bond in the amount of one hundred percent (100%) of the contract amount, conditioned upon the faithful performance of the contract in accordance with specifications and conditions of the contract is required for Construction contracts of \$300,000 or more. Such bond shall be solely for the protection of the North Carolina Department of Transportation and the State of North Carolina.

A payment bond in the amount of one hundred percent (100%) of the contract amount, conditioned upon the prompt payment for all labor or materials for which the Contractor, or his subcontractors, are liable is required for Construction contracts greater than \$300,000. The payment bond shall be solely for the protection of persons or firms furnishing materials or performing labor for this contract for which the Contractor is liable.

The successful bidder, within ten (10) days after notice of award, shall provide the Department with a contract payment bond and a contract performance bond each in an amount equal to 100 percent of the amount of the contract.

ENGINEER:

The Engineer for this project shall be the Division 2 Engineer, Division of Highways, North Carolina Department of Transportation, acting directly or through a duly authorized representative, such representative acting within the scope of particular assigned duties or authority.

PAYMENT:

The Contractor may submit a request for partial payment on a monthly basis, or other interval as approved by the Engineer. Compensation for all pay items shall be in accordance with the *Standard Specifications*.

The amount of partial payments will be based on the work accomplished and accepted as the last day of the approved pay period.

Request for payment shall be made by Contractor's Invoice submitted to:

North Carolina Department of Transportation Attention: Mr. John Hughes PO Box 371 New Bern, NC 28560

All invoice items and unit costs shall correspond to contract pay items. In the event of error or discrepancy in items or unit costs, the Department may return the invoice to the Contractor for correction.

Form DBS-IS must be included with all requests for payment in order for that request to be processed. Information included on this form shall reflect actual payments made to DBE/MBE/WBE firms. It is available for download at http://www.ncdot.org/doh/forms/files/DBE-IS.xls. A responsible fiscal officer of the payee firm who can attest to the date and amounts of the payments shall certify that the accounting is correct. One hundred percent (100%) payment shall be made after successful completion of the work as verified by the final inspection.

CONTRACT BID QUANTITIES:

Contractor shall note that the contract quantities provided are used solely for determining the lowest responsible bidder. No minimum amount of work is guaranteed under this contract.

MATERIALS AND TESTING:

The Engineer reserves the right to perform all sampling and testing deemed appropriate. The Contractor shall furnish the applicable certifications and documentation for all materials as required by the Standard Specifications and the Engineer. Material, which is not properly certified, will not be accepted.

WARRANTY - MATERIALS AND WORKMANSHIP:

All materials and workmanship shall be warranted for a period of one (1) year from the date of installation.

CLAIMS FOR ADDITIONAL COMPENSATION OR EXTENSION OF TIME:

Any claims for additional compensation and/or extensions of the completion date shall be submitted to the Division Engineer with detailed justification within thirty (30) days after receipt of the final invoice payment. The failure of the Contractor to submit the claim(s) within thirty (30) days shall be a bar to recovery.

CONTRACTOR CLAIM SUBMITTAL FORM:

(9-16-08) SP1G140

If the Contractor elects to file a written claim or requests an extension of contract time, it shall be submitted on the *Contractor Claim Submittal Form (CCSF)* available through the Construction Unit or http://ncdot.org/doh/operations/dp_chief_eng/constructionunit/formsmanuals/.

LEGAL RELATIONS AND RESPONSIBILITY TO PUBLIC:

(12-19-06)(Rev 3-16-10)

Revise the 2006 Standard Specifications as follows:

Page 1-60, 107-2 Assignment of Claims Void, replace the reference from G.S. 143-3.3 to G.S. 143B-426.40A.

Page 1-69, 107-18 Contractor's Responsibility for Work, in the first paragraph, last sentence, replace the word *legally* with the word *contractually*.

SP1 G152

GIFTS FROM VENDORS AND CONTRACTORS:

(12-15-09)

By Executive Order 24, issued by Governor Perdue, and *N.C. G.S.*§ 133-32, it is unlawful for any vendor or contractor (i.e. architect, bidder, contractor, construction manager, design professional, engineer, landlord, offeror, seller, subcontractor, supplier, or vendor), to make gifts or to give favors to any State employee of the Governor's Cabinet Agencies (i.e. Administration, Commerce, Correction, Crime Control and Public Safety, Cultural Resources, Environment and Natural Resources, Health and Human Services, Juvenile Justice and Delinquency Prevention, Revenue, Transportation, and the Office of the Governor). This prohibition covers those vendors and contractors who:

- (1) have a contract with a governmental agency; or
- (2) have performed under such a contract within the past year; or
- (3) anticipate bidding on such a contract in the future.

For additional information regarding the specific requirements and exemptions, vendors and contractors are encouraged to review Executive Order 24 and G.S. § 133-32.

Executive Order 24 also encouraged and invited other State Agencies to implement the requirements and prohibitions of the Executive Order to their agencies. Vendors and contractors should contact other State Agencies to determine if those agencies have adopted Executive Order 24.

<u>DIVISION CONTRACT</u> PROJECT SPECIAL PROVISIONS – ROADWAY / STRUCTURES

GENERAL:

Expansion joints to be repaired or replaced shall be designated by the Engineer. The Contractor shall begin work within 60 days of notification. Failure to respond within the designated time frame may result in liquidated damages or cancellation of this contract.

All concrete and/or asphalt repairs shall be designated by the Engineer. The Contractor shall begin work within 60 days of notification. Failure to respond within the designated time frame may result in liquidated damages or cancellation of this contract.

All areas of foam injections shall be designated by the Engineer. The Contractor shall begin work within 60 days of notification. Failure to respond within the designated time frame may result in liquidated damages or cancellation of this contract.

Payment for mobilization will be made for each occurrence of mobilization.

The contractor shall notify the Engineer/Supervisor at the beginning of each week of his intended schedule of work. This will allow the DOT to schedule inspections accordingly.

All existing joint material, concrete and asphalt removed shall become the property of the Contractor and shall be disposed of properly.

MOBILIZATION:

This work consists of preparatory work and operations to mobilize personnel, materials, and equipment to the project site.

The Contractor shall be paid for each mobilization type into Division 2 executed for the purpose of performing work under this contract. Mobilization types are joint/deck repair work (line items 2-9), foam leveling/stabilization (line items 10-11), and epoxy coating system (line items 12-13). The Contractor will be paid a maximum of three (3) mobilizations for any given time period.

Travelling between work sites within Division 2 will not be paid for as Mobilization.

TRAFFIC CONTROL:

The Contractor shall maintain traffic during construction and provide, install, and maintain all traffic control devices in accordance with these project guidelines, the Project Special Provisions, North Carolina Department of Transportation 2006 Standard Specifications for Roads and Structures, and the current edition of the Manual of Uniform Traffic Control Devices (MUTCD).

The Contractor shall utilize complete and proper traffic controls and traffic control devices during all operations. All traffic control and traffic control devices required for any operation shall be functional and in place prior to the commencement of that operation. Signs for temporary operations shall be removed during periods of inactivity. The Contractor is required to leave the project in a manner that will be safe to the traveling public and which will not impede motorists.

Traffic movements through lane closures on roads with two way traffic shall be controlled by flaggers stationed at each end of the work zone. In situations where sight distance is limited, the Contractor shall provide additional means of controlling traffic, including, but not limited to, two-way radios, pilot vehicles, or additional flaggers. Flaggers shall be competent personnel, adequately trained in flagging procedures, and furnished with proper safety devices and equipment including, but not limited to, safety vests and stop/slow paddles.

Failure to comply with any of the requirements for safety and traffic control of this contract shall result in suspension of work as provided in sub article 108-7(2) of the 2006 Standard Specifications.

When a temporary lane closure on a multi-lane roadway is shifted to another lane, the contractor will be paid for a Lane Closure Shift. On 2-lane, 2-way roadways, the contractor will be paid one Temporary Lane Closure for both lanes.

Payments shall be made under:

Temporary Lane Closure (2-Lane, 2-Way Roadway)	Each
Temporary Lane Closure (Multi-Lane Roadway)	
Lane Closure Shift (Multi-Lane Roadway)	
Nighttime Temporary Lane Closure (2-Lane, 2-Way Roadway)	
Nighttime Temporary Lane Closure (Multi-Lane Roadway)	
Nighttime Lane Closure Shift (Multi-Lane Roadway)	

SILICON EXPANSION JOINT REPLACEMENT:

Contractor shall remove the existing expansion joint, clean the area in accordance with the manufacturer's recommendations, and place the silicon expansion joint in accordance with the manufacturer's recommendations. The expansion joint shall be replaced with the materials stated in this contract.

All materials shall be delivered unopened in their original containers bearing the manufacturer's label, date of manufacture, batch number, trade name brand, and quantity. Sufficient material to perform the entire expansion joint shall be "on hand" prior to removing the existing expansion joint. Stored materials may be inspected prior to their use and shall meet the requirements of these provisions. Each shipment of repair material shall be accompanied by Material Safety Data Sheets (MSDS) and a certificate of compliance certifying that the materials conform to the requirements of these provisions.

The repair material shall be one of the following approved products:

Joints less than or equal to one (1) inch in width:

Sealant - Dow 888

Baysilon 960 (silicon based)

Joints greater than one (1) inch in width:

Sealant – Dow 902 (silicon based)

The entire cost for the silicon expansion joint replacement including but not limited to labor, maintenance, equipment, tools, and incidentals will be included in the unit prices for Silicon Joint Replacement.

Silicon Joint ReplacementLinear Feet

EVAZOTE EXPANSION JOINT REPLACEMENT:

Contractor shall remove the existing expansion joint, clean the area in accordance with the manufacturer's recommendations, and place the evazote expansion joint in accordance with the manufacturer's recommendations. Contractor shall have a manufacturer's representative present during the installation of the first evazote expansion joint of the project. The expansion joint shall be replaced with the materials stated in this contract.

All materials shall be delivered unopened in their original containers bearing the manufacturer's label, date of manufacture, batch number, trade name brand, and quantity. Sufficient material to perform the entire expansion joint shall be "on hand" prior to removing the existing expansion joint. Stored materials may be inspected prior to their use and shall meet the requirements of these provisions. Each shipment of repair material shall be accompanied by Material Safety Data Sheets (MSDS) and a certificate of compliance certifying that the materials conform to the requirements of these provisions.

Evazote Joint Seal Specifications

Use preformed seals compatible with concrete and resistant to abrasion, oxidation, oils, gasoline, salt and other materials that are spilled on or applied to the surface. Use a low-density closed cell, cross-linked ethylene vinyl acetate polyethylene copolymer nitrogen blown material for the seal. Use seals manufactured with grooves 1/8" (3 mm) ± wide by 1/8" (3 mm) ± deep and spaced between 1/4 (6 mm) and 1/2 inch (13 mm) apart along the bond surface running the length of the joint. Use seals sized so that the depth of the seal meets the manufacturer's recommendation, but is not less than 70% of the uncompressed width. Provide a seal designed so that, when compressed, the center portion of the top does not extend upward above the original height of the seal by more than 1/4 inch (6 mm). Splice the seal using the heat welding method by placing the joint material ends against a Teflon heating iron of 350°F (177°C) for 7 - 10 seconds, then pressing the ends together tightly. Do not test the welding until the material has completely cooled. Use material that resists weathering and ultraviolet rays. Provide a seal that has a working range of 30% tension and 60% compression and is watertight along its entire length including the ends. Have the top of the evazote seal clearly shop marked. Inspect the evazote seals upon receipt to ensure that the marks are clearly visible upon installation.

Provide seals that meet the requirements given below:

TEST	TEST METHOD	REQUIREMENT	
Elongation at break	ASTM D3575	$210 \pm 15\%$	
Tensile strength, psi (kPa)	ASTM D3575	$110 \pm 15 \ (755 \pm 100)$	
Compression Recovery	AASHTO T42		
(% of original width)	50% compr. for 22 hr.	87 ± 3	
(% of original width)	@ 73°F (23°C) 1/2 hr. recovery		
Weather/Deterioration	AASHTO T42	No deterioration	
w cather/ Beterior ation	Accelerated Weathering	for 10 years min.	
Compression/Deflection	@ 50% deflection of	10 psi (69 kPa) min.	
	original width	10 psi (03 ki a) iliili.	
	@ 50% deflection of	60 psi (414 kPa) max.	
	original width	00 psi (414 ki a) max.	

Tear Strength, psi (kPa)	ASTM D624	$16 \pm 3 \ (110 \pm 20)$
Density	ASTM D545	2.8 to 3.4
Water Absorption	ASTM D3575 Total	2
(% vol/vol)	immersion for 3 months	3

Adhesives

Use a two component, 100% solid, modified epoxy adhesive with the seal that meets the requirements of ASTM C881, Type 1, Grade 3, Class B & C and has the following physical properties:

Tensile strength
Compressive strength
Shore D Hardness
Water Absorption

3500 psi (24.1 MPa) min.
7000 psi (48.3 MPa) min.
75 psi (0.5 MPa) min.
0.25% by weight

Use an adhesive that is workable to 40°F (4°C). When installing in temperatures below 40°F (4°C) or for application on moist, difficult to dry concrete surfaces, use an adhesive specified by the manufacturer of the joint material.

Joint Preparation

After removal of existing joint, area must be sand-blasted immediately prior to installation of the new joint. Blasting medium shall be a non-silica product. Blasting medium shall be swept up and removed from the project. Traffic shall be protected from blasting operations. Joint shall be re-cleaned (and re-blasted if necessary), if joint installation is delayed and joint is determined to be unsuitable due to dirt, oils, etc. Exact size of joint seals to be used where joints have been repaired with elastomeric concrete shall be determined after the elastomeric concrete work is completed.

Seal Installation

Do not install the joint seal if the ambient air temperature is below 45°F (7°C).

Begin installation at the low end of the joint after applying the mixed epoxy to the sides of both the joint material and both sides of the joint, making certain to completely fill the grooves with epoxy. With gloved hands, compress the material and with the help of a blunt probe, push it down into the joint until it is recessed approximately 1/4 inch (6 mm) below the surface. Do not push the seal at an angle that would stretch the material. Once work on a joint begins, do not stop until it is completed. Clean the excess epoxy off the surface of the joint material *quickly* and *thoroughly*. Do not use solvents to remove excess epoxy. Remove excess epoxy in accordance with the joint manufacturer's recommendations.

The entire cost for the Evazote expansion joint replacement including but not limited to labor, maintenance, equipment, tools, and incidentals will be included in the unit prices for Evazote Joint Replacement.

Payments shall be made under:

Evazote Joint ReplacementLinear Feet

EVAZOTE EXPANSION JOINT PLACEMENT IN OPEN JOINTS:

Contractor shall cut or mill concrete deck along the existing open expansion joints to create a ledge for the Evazote expansion joint material to rest on. This indention shall be constructed in a continuous and straight line parallel to the existing joint. It must be constructed to the necessary depth for the material to be installed according to the manufactor's specifications. All areas shall be smooth and clean before Evazote material is to be placed. The Evazote expansion joint shall then be placed in accordance with the manufacturer's recommendations.

The entire cost for the cutting or milling of the open joints and the Evazote expansion joint placement including but not limited to labor, maintenance, equipment, tools, and incidentals will be included in the unit prices for Open Joint Evazote Placement.

Payments shall be made under:

Open Joint Evazote Placement Linear Feet

ASPHALT JOINT REPAIR AND REPLACEMENT:

Joint material shall be hot applied, pre-mixed bituminous material that will provide a smooth riding surface and a waterproof joint. The contractor shall prepare the surface to be repaired by saw cutting to a minimum of 20" wide and 2" in depth, per manufacture's specifications, or as directed by the Engineer, removing all loose material, and cleaning the area with compressed air.

No repairs shall be made during periods of rain, snow, or sleet. Standing water shall be removed prior to placement of material.

Steel bridging plates shall be used as needed to provide load transfer across the joint opening. Plates shall be plate steel, 1/8" to 1/4" thick, and 4" to 9" wide.

Bulking aggregate shall be chosen from the Basalt, Gritstone, Gabbro, or Granite Family. Only ½" to 1" size stone shall be used.

Material Requirements

All materials shall meet the specifications as approved by the Engineer prior to use. The joint material shall be one of the following approved products:

FibreJoint, A/P Bridge Flex Joint, or other NCDOT approved material.

Payments shall be made under:

Asphalt Joint Repair/Replacement (18"-24" wide, w/ plate)......Linear Feet

ELASTOMERIC CONCRETE PLACEMENT:

Contractor shall repair damaged concrete adjacent to expansion joints as directed by the Engineer with elastomeric concrete.

Contractor shall submit falsework plans for approval. Falsework plans shall take into account expansion of the bridge deck due to changes in temperature.

Do not place elastomeric concrete if the ambient air temperature is below 45°F (7°C). Prepare and apply a primer, as per manufacturer's recommendations, to all vertical concrete faces, all steel components to be in contact with elastomeric concrete, and to areas specified by the manufacturer. Align the angles with the joint opening.

Prepare, batch, and place the elastomeric concrete in accordance with the manufacturer's instructions. Place the elastomeric concrete while the primer is still tacky and within 2 hours after applying the primer. Pay careful attention to properly consolidate the elastomeric concrete around the steel and anchors.

Tarps are to be utilized under the mixing areas, and the bridge deck joint shall be taped off to protect the bridge deck from spills during elastomeric concrete installation.

Provide materials that comply with the following minimum requirements at 14 days.

CONCRETE PROPERTIES	TEST METHOD	MINIMUM REQUIREMENT
Bond, psi (Strength to Concrete MPa)	ASTM D638 (D638M)	450 (3.1)
Brittleness by Impact, ft-lb (kg-m)	Ball Drop	7 (0.97)
Compressive Strength, psi (MPa)	ASTM D695 (D695M)	2800 (19.3)

BINDER PROPERTIES (without aggregate)	TEST METHOD	MINIMUM REQUIREMENT
Tensile Strength, psi (MPa)	ASTM D638 (D638M)	800 (5.5)
Ultimate Elongation	ASTM D638 (D638M)	150%
Tear Resistance, lb/in (kN/m)	ASTM D624	90 (15.7)

In addition to the requirements above, use elastomeric concrete that also resists water, chemical, UV, and ozone exposure and withstands extreme temperature (freeze-thaw) changes.

Furnish a manufacturer's certification verifying that the materials satisfy the above requirements. Provide samples of elastomeric concrete to the Engineer, if requested, to independently verify conformance with the above requirements.

The entire cost for joint repair using elastomeric concrete including but not limited to labor, maintenance, equipment, tools, and incidentals will be included in the unit prices for Joint Repair using Elastomeric Concrete. Linear feet measurement will include both sides of the joint to be repaired.

Payments shall be made under:

Joint Repair using Elastomeric Concrete (16" wide or less and 2" deep or less)......Linear Feet Joint Repair using Elastomeric Concrete (Greater than 16" wide or greater than 2"deep)Cubic Feet

CONCRETE/ASPHALT DECK REPAIR (FIBRECRETE B OR EQUIVALENT):

Concrete/asphalt repairs shall be made using the following approved Hot Applied Flexible Repair Material:

Fibrecrete B or approved equal

The Contractor shall prepare areas by removing any loose debris using a pavement breaker, by using a mechanical planer or as directed by the Engineer. The recess is then cleaned and dried using hot compressed air to thoroughly prepare the surface, removing all debris and loose material. The Hot Applied Flexible Repair Material is immediately poured and screeded to fill the recess flush with the surrounding area and overlap the edges. While the material is still molten, a preheated high P.S.V. aggregate is applied to the surface.

When repairing pot holes from 1-1/2" to full depth, the Contractor will include $\frac{1}{2}$ " - 1" washed aggregate at the rate of no more than 30% of volume as directed by the Engineer. The balance of the repair will be completed as previously stated.

All materials shall be delivered unopened in their original containers bearing the manufacturer's label, specifying date of manufacture, batch number, trade name or brand and quantity.

Sufficient material to perform the entire repair application shall be in storage at the site or at the Contractors facility prior to any field preparation, so that there shall be no delay in procuring the material for each day's application.

Stored materials may be inspected prior to their use and shall meet the requirements of these Special Provisions at the time of use.

Any material which is rejected because of failure to meet the required tests or that has been damaged so as to cause rejections shall be immediately replaced by the Contractor at no additional cost to the Department.

Each shipment of the Hot Applied Flexible Repair Material shall be accompanied by Material Safety Data Sheets (MSDS) and a Certificate of Compliance certifying that the materials conform to the requirements as approved by NCDOT Materials and Test Unit.

Basis of Payment

The quantity of Hot Applied Flexible Repair Material for which payment will be made will be the actual pounds of material used. Payment shall be in full compensation for all labor, tools, equipment and incidentals necessary for the completion of the work. Payment shall be made as follows:

CONCRETE/ASPHALT DECK REPAIR (FIBRECRETE G OR EQUIVALENT):

Concrete/asphalt repairs shall be made using the following approved Hot Applied Flexible Repair Material:

Fibrecrete G or approved equal

The Contractor shall prepare areas by removing any loose debris using a pavement breaker, by using a mechanical planer or as directed by the Engineer. The recess is then cleaned and dried using hot compressed air to thoroughly prepare the surface, removing all debris and loose material. The Hot Applied Flexible Repair Material is immediately poured or screeded to fill the recess and overlap the edges. While the material is still molten, a preheated high P.S.V. aggregate is applied and then compacted to ensure that the finished repair is flush with the surrounding area.

When repairing pot holes from 1-1/2" to full depth, that are not adjacent to or spanning a joint, the Contractor will include $\frac{1}{2}$ " – 1" washed aggregate at the rate of no more than 30% of volume as directed by the Engineer. The balance of the repair will be completed as previously stated.

All materials shall be delivered unopened in their original containers bearing the manufacturer's label, specifying date of manufacture, batch number, trade name or brand and quantity.

Sufficient material to perform the entire repair application shall be in storage at the site or at the Contractors facility prior to any field preparation, so that there shall be no delay in procuring the material for each day's application.

Stored materials may be inspected prior to their use and shall meet the requirements of these Special Provisions at the time of use.

Any material which is rejected because of failure to meet the required tests or that has been damaged so as to cause rejections shall be immediately replaced by the Contractor at no additional cost to the Department.

Each shipment of the Hot Applied Flexible Repair Material shall be accompanied by Material Safety Data Sheets (MSDS) and a Certificate of Compliance certifying that the materials conform to the requirements as approved by NCDOT Materials and Test Unit.

Basis of Payment

The quantity of Hot Applied Flexible Repair Material for which payment will be made will be the actual pounds of material used. Payment shall be in full compensation for all labor, tools, equipment and incidentals necessary for the completion of the work. Payment shall be made as follows:

Concrete/Asphalt Deck Repair (Fibercrete G or Equivalent)Pounds

<u>HDPF (HIGH DENSITY POLYURETHANE FOAM) PROCESSES – GENERAL AND SLAB LEVELING, UNDERSEALING AND VOIDFILLING:</u>

Material

The medium used for slab leveling, undersealing and voidfilling shall be a blown high-density polyurethane. The material shall be hydrophobic.

The high-density, closed cell, polyurethane system shall exhibit the following physical characteristics and properties:

DENSITY, Lbs/Ft	COMPRESSIVE STRENGTH
ASTM 1622	ASTM 1621
3.0	40 psi
3.5	50 psi
4.0	60 psi
6.0	110 psi

The polyurethane foam system will have a free rise density of 3.0 - 4.2 lb/ft, with a minimum compressive strength of 40 psi. The expansion of the polyurethane foam under pressure increases the foam density above the original free rise density value. The compressive strength is a function of density

of the tested material; therefore the foam produced during the lifting process will normally have a higher compressive strength than foam produced without restriction (free rise).

Equipment

A listing of lifting and under sealing equipment shall be submitted to the Engineering Department for review. The minimum list of equipment required shall be as listed below. The listing is a minimum and shall not preclude the use of additional equipment.

- A. A pneumatic drill and an electric drill capable of drilling 5/8"- 3/4" dia. holes.
- B. A dynamic penetrometer.
- C. A truck-mounted pumping unit capable of injecting the high-density polyurethane formulation below the concrete slab or asphalt pavement into the sub-surface soils. This pumping unit will be capable of controlling the rate of rise of the pavement and densifying the sub-surface soils.
- D. A laser level or dial indicator devices capable of monitoring and verifying that the concrete slab or asphalt pavement is raised to the required elevation.

Contractor Pre-Qualification Requirements

The contractor shall have a minimum of three years of experience in performing this type of work and a minimum of 10 projects on which the contractor has successfully completed this type of work. Prior to beginning work, the contractor shall submit certification to the engineer that the contractor meets the minimum required experience. The certification shall include a listing of previous clients with contact name and phone numbers.

Prior to being approved for performing this type of work, the following documents shall be supplied by the contractor to the engineer and found to be acceptable:

- (a) A report from an industrial hygienist who has conducted a personnel, production vehicle and typical jobsite safety review of the contractor's implementation procedures involving the polyurethane material.
- (b) A copy of the contractor's Employee Safety Manual specific to polyurethane pavement raising and undersealing work.

Construction Methods

Final elevations shall be within 1/4" of the elevations proposed by profile, to the extent permitted by the structure, existing construction and site conditions. A tight string line may be used to monitor and verify elevations for slab lengths of 50 foot or less. For longer sections, a laser level will be used to monitor and verify elevations. Elevations can also be verified by flooding the area to confirm that the paving has been realigned properly. The Contractor shall be responsible for any pavement blowouts or excessive pavement lifting which may result from process and shall repair the damaged area to the satisfaction of the Engineer without additional cost.

The HDPF shall reach 90% of the full compressive strength in 15 minutes after injection.

HDPF Slab Leveling, Undersealing and Voidfilling

For leveling and undersealing, the Contractor shall prepare concrete to be leveled by profiling existing pavement and determining where the pavement needs to be raised. Voidfilling shall be in areas as indicated and as directed by the engineer. A series of 5/8" holes shall be drilled into the pavement 6-8 foot O.C. (exact location and spacing to be determined in the field). The expanding HDPF material shall then be injected under the slab. The amount of rise shall be controlled by regulating the rate of HDPF injected. Injection holes shall be sealed with non-expansive cementitious grout once leveling is complete.

Measurement

The polyurethane material shall be paid for by the pound, which will include furnishing and injecting material.

Double Verification of Actual Pounds pumped will be accomplished as follows:

- 1. A conversion from pump counters to pounds will be provided with a manufacturer's certification of the accurate conversion factor.
- 2. A visual measurement conversion on the actual totes/barrels of pounds per inches pumped.

Basis of Payment

The quantity of material to be paid for shall be the quantity actual used, based on the contract unit price shown on the bid form. Only those items shown on the bid sheet shall be paid for directly. All other labor, tool, equipment, and incidentals necessary for the completion of the project shall be considered incidental to the contract bid items. Payment shall be made as follows:

HDPF Slab Leveling, Undersealing and Voidfilling......Pounds

HYDROPHOBIC FOAM SOIL STABILIZATION:

Important Notice

Inject hydrophobic polyurethane injection resin into the soil at locations to be determined by the Engineer to stabilize weak and loose soils and prevent water migration.

Specification describes pressure injection of soils to stabilize weak and loose soils and stop water migration through injected soils using a hydrophobic polyurethane injection resin.

Part 1 - General

1.01 Purpose

A. Furnish all materials, labor, tools, and equipment to stabilize soils as indicated on drawings or in contract documents.

1.02 Related Work

A. None

1.03 Quality Assurance

- A. Manufacturer of polyurethane material shall have been in existence for a period of not less than 15 (fifteen) years.
 - 1. The contractor must provide the engineer with job references where they successfully used hydrophobic polyurethane resins for soil stabilization.

1.04 Delivery, Storage, and Handling

- A. Deliver the specified products in original, unopened containers with manufacturer's name, labels, product identification, and batch numbers intact.
- B. Store and condition the specified product as recommended by the manufacturer.

1.05 Job Conditions

- A. Do not apply the material if it is or it appears that it will be raining or snowing unless precautions are taken to protect the material from moisture. If temperature is or will be below 34 degrees F, protect grout from freezing. Ice or the formation of ice can prevent grout penetration and travel.
- B. Contractor will take all precautions necessary to insure that no damage will occur to any work zone due to handling or pumping of the polyurethane resin.

Part 2 - Materials

2.01 Acceptable Manufacturers

- A. Prime Flex 910 is considered to conform to the requirements of this specification and has performed satisfactorily for soil stabilization.
- B. The use of any other similar product will be considered providing the contractor requests its use in writing to the Engineer.

2.02 Performance Criteria

- A. Physical properties of polyurethane resin:
 - 1. Water activated resin
 - 2. Variable cure rate
 - 3. Viscosity -40 cps +/-20 cps
 - 4. Solids content 100% solids
 - 5. Characteristics Hydrophobic polymer
- B. Physical properties of catalyst:
 - 1. Appearance Clear liquid
 - 2. Viscosity -15-20 cps
 - 3. Solids content 100%
- C. Physical properties of polyurethane resin cured under pressure:
 - 1. Shrinkage (ASTM D-1042 / D-756) None

2. Tensile properties (ASTM D-1623)

- a. Tensile strength 23 psi
- b. Elongation 3%

2.03 Materials

A. Polyurethane Resin

- 1. Polyurethane resin shall be a single component material that requires catalyst. Adjusting the percentage of catalyst to the base resin shall control reaction time of the grout.
- 2. Material shall be a water reactive grout.
- 3. Polyurethane resin shall be based on MDI in combination with pre-polyols.
- 4. Polyurethane resin shall be hydrophobic in nature.

Part 3 – Execution

3.01 Preparation

- A. Prior to starting work the Contractor is responsible for locating all underground utilities in accordance with NCGS Chapter 87. This may be done by contacting the NC One-Call Center (811).
- B. Contractor shall determine appropriate spacing and depth placement for injection probes to successfully seal and stabilize area as shown in drawings. Test sections may be necessary to determine best probe spacing depending on soil types and conditions encountered. (Typical spacing will vary between 12-60" in each direction and if multiple rows are needed then each row shall be offset ½ the space distance.) Probes: Pipe shall utilize Prime Resins Soil Probe, Expendable Drive Point, or other acceptable means to keep dirt from clogging pipe during driving. Type and size to be determined by contractor. Pipes may be placed by manual driver, pneumatic driver, auger, or water jetting.
- C. Prior to injecting grout, contractor shall ensure that the soils contain enough moisture to fully reach the grout OR shall use a plural component pump to inject water and grout simultaneously (twin streaming) through injection pipe/probe. When twin streaming is done, a ratio of 10:1 (grout to water) shall be used. A pump capable of injection pressures from 100-3000 psi is recommended. Flow rate of pumps shall be 1.50 gpm minimum. Manually operated or "hand pumps" are considered unacceptable and cannot be used.
- D. A grout log shall be maintained recording amount of grout and percentage of catalyst used for each pipe/probe and shall be available for inspection by the Engineer at all times. Request for payment of grout shall include a copy of grout log detailing quantities used.

3.02 Application

A. Contractor shall determine amount of grout to be injected into each probe to ensure all areas with the work area are fully grouted. Grouting shall use the "Lift Grouting Technique" where the pipe is raised of jacked up and grout is injected in 12-15" intervals or lifts. The amount of grout to be injected at each lift is to be determined by the contractor based on soil conditions for that particular area. Injection pressures will vary depending on soil conditions.

B. Adhere to all limitations and cautions set forth by the manufacturer.

3.03 Safety

- A. Copy of data sheet and Material Safety Data Sheet (MSDS) of all chemicals used must be on site at all times.
- B. Workers must wear protective rubber gloves, full protection (front and side) safety glasses, chemical goggles or face shield, and any other necessary precautions as outlined in product MSDS when handling or pumping grout.
- C. All chemicals used on site including grout, catalyst, and chemicals to clean pumps and equipment shall be non-flammable.

3.04 Cleaning

- A. Flush the pump and hoses with approved pump flush. Do not use solvents to clean off human skin.
- B. Uncured polyurethane resin can be removed from tools with an approved solvent. Cured polyurethane can only be removed mechanically.
- C. Remove all pipes from work area.
- D. Leave work area clean and neat.

Basis of Payment

The quantity of material to be paid for shall be the quantity actual used, based on the contract unit price shown on the bid form. Only those items shown on the bid sheet shall be paid for directly. All other labor, tool, equipment, and incidentals necessary for the completion of the project shall be considered incidental to the contract bid items. Payment shall be made as follows:

EPOXY COATING SYSTEM:

Description

This work shall consist of furnishing and applying a two-coat or one coat epoxy overlay system over the concrete bridge deck in accordance with the contract documents and includes a crack filling and repairing overlay consisting of a pre-treatment and either one (1) or two (2) layers of hybrid polymer resins with a special blend of extremely hard aggregate designed to provide a 3/8 inch two layer or a 3/16 inch one later thick application for the purpose of crack treatment, complete waterproofing, and providing a non-skid surface. The overlay system shall be formulated and applied to withstand continuous heavy traffic, extreme changes in weather conditions, and deformations due to structure loading and temperature changes. Contractor shall have a manufacturer's representative present during the installation of the first epoxy overlay system of the project.

Materials

(A) Pre-Treatment

Pre-treatment shall be applied consisting of a two part hybrid polymer free of any fillers or volatile solvents and formulated to provide a simple volumetric mixing ratio of two components such as one to one or two to one by volume. This hybrid polymer pretreatment shall be formulated to provide a combination of low viscosity and low surface tension to fill and repair cracks and enhance bonding of the overlay system to the bridge deck.

Physical Requirements of Cured Pre-treatment: When components A and B are mixed in the appropriate ratio, the cured resin shall conform to the requirements for Epoxy, Type 2 in Article 1081-1 of the *Standard Specifications*.

(B) Overlay (Two Layers & One Later)

This two-part epoxy polymer overlay system shall be free of any fillers or volatile solvents and shall be formulated to provide a simple volumetric mixing ratio of two components such as one to one or two to one by volume. The epoxy polymer overlay system shall be formulated to provide flexibility in the system without any sacrifice of the hardness, chemical resistance or strength of the system. Use of external/conventional flexibilizers will not be accepted. Flexibility shall be by interaction of elastomers to chemically link in the process of curing so that the flexibility of the molecule is least affected during the low temperature conditions that are confronted in actual use.

Physical Requirements of Epoxy Polymer Overlay: When components A and B are mixed in the appropriate ratio, the cured resin shall conform to the requirements for Epoxy, Type 2 in Article 1081-1 of the *Standard Specifications*.

Load Bearing Capabilities of the Overlay System: The cured epoxy polymer overlay system shall exhibit the following load bearing capacity. At approximately 20% strain, the polymer shall retain at least 85% of its original load bearing strength (tensile stress) as per ASTM D-638.

Pre-treatment and Overlay Compatibility: The Pre-treatment and Overlay system shall be of compatible materials produced, supplied and certified by the same manufacturer.

(C) Aggregate

Aggregate used for all layers shall be non-friable, non-polishing, clean and free from surface moisture. The aggregate shall be 100% fractured, thoroughly washed and kiln dried to a maximum moisture content of 0.2% by weight, measured in accordance with ASTM C566. The fracture requirements shall be at least one mechanically fractured face and will apply to materials retained on a U.S. No. 10 sieve.

Aggregate properties shall conform to the properties of Table 1 and Table 2:

TABLE 1			
AGGREGATE PROPERTIES			
Property	Value	Test Method	
Moisture Content, max.	0.2% by weight	AASHTO T225	
Mohs Hardness, min.	6.5		
Soundness Loss, 5 cycles in Sodium Sulfate, max.	5.4 %	AASHTO T104	
Micro-Deval, max.	10%	AASHTO TP58	

TABLE 2		
AGGREGATE GRADATION		
Sieve Size	Percent Passing	
No. 6	60-100	
No. 10	0-20	
No. 20	0-10	

System Quality Submittals

- (1) Independent Lab Performance Submittals: Prior to beginning work, the epoxy polymer overlay system manufacturer shall submit documentation showing verification by a nationally recognized independent testing laboratory that the overlay material:
 - (a) Has the capability of preventing the ingress of essentially all the chloride ions into the concrete at 1" depth when tested according to NCHRP-244 method.
 - (b) Has the capability to de-activate the existing chloride ions present in the concrete specimen so that the corrosion of steel bars embedded in the concrete stop corroding.
 - (c) Fully complies with the test results from the above testing requirements and specified values in Tables 1 and 2, and the *Standard Specifications* the individual components and cured system. Subsequently, this certification shall be provided on each lot number to be used on the project.
- (2) Past Performance Submittal: Prior to beginning work, the selected epoxy polymer overlay system manufacturer shall submit records demonstrating verifiable satisfactory performance under average daily traffic of at least 10,000 for at least five (5) years on at least three (3) bridges in any state.
- (3) **Performance Guarantee:** The Contractor shall guarantee materials and workmanship against latent and patent defects arising from faulty materials, faulty workmanship or negligence for a period of **five** (5) **years two coat overlay system** and for a period of **one** (1) **year one coat overlay system** following the date of final acceptance of the work for maintenance and shall replace such defective materials and workmanship without cost to the Department. The Contractor will not be responsible for damage due to normal wear and tear, for negligence on the part of the Department, and/or for use in excess of the design.

Where items of equipment or material carry a manufacturer's guarantee for any period in excess of five years, then the manufacturer's guarantee shall apply for that particular piece of equipment or material. The Department's first remedy shall be through the manufacturer although the Contractor is responsible for invoking the warranted repair work with the manufacturer. The Contractor's responsibility shall be limited to the term of the manufacturer's guarantee. NCDOT would be afforded the same warranty as provided by the Manufacturer.

This guarantee provision shall be invoked for the following conditions:

- (a) Any delaminations
- (b) Excessive loss of aggregate
- (c) Skid resistance less than 40 as measured by AASHTO T242

Payment and/or performance bonds shall cover the guarantee period.

Construction Methods

(A) Surface Preparation

Clean the entire deck surface by shot blasting and other means to remove asphaltic material, oils, dirt, rubber, curing compounds, paint carbonation, laitance, weak surface mortar and other potentially detrimental materials that may interfere with the bonding or curing of the overlay.

Acceptable cleaning is usually recognized by a significant change in the color of the concrete and mortar, and the beginning exposure of coarse aggregate particles. Mortar, that is sound and soundly bonded to the coarse aggregate, shall have open pores due to cleaning to be considered adequate for bond. Areas of asphalt larger than one inch in diameter, or smaller areas spaced less than six inches apart, shall be removed. Traffic paint lines shall be considered clean when the concrete has exposed aggregate showing through the paint stripe. Remove all dust and other loose material. Care shall be taken and methods used to fully collect the excess material and limit loss to the environment.

Epoxy based overlays shall not be placed on hydraulic cement concrete that is less than 28 days old. Patching and cleaning operations shall be inspected and approved prior to placing each layer of the overlay. Any contamination of the deck or intermediate courses, after initial cleaning, shall be removed. The epoxy based overlay system shall be applied within 24 hours following the final cleaning and prior to opening the area to traffic.

The deck shall be completely dry at the time of application of the epoxy concrete overlay.

(B) Equipment

Equipment shall consist of no less than an epoxy distribution system, aggregate spreader, application squeegee and vacuum trucks. The distribution system or distributor shall accurately blend the epoxy resin and hardening agent, and shall uniformly and accurately apply the epoxy materials at the specified rate to the bridge deck in such a manner as to cover 100% of the work area. The aggregate spreader shall be propelled in such a manner as to uniformly and accurately apply the aggregate to cover 100% of the epoxy material. The vacuum truck shall be self-propelled.

(C) Application

Handling and mixing of the epoxy resin and hardening agent shall be performed in a safe manner to achieve the desired result in accordance with the manufacturer's recommendations as approved and as directed by the Engineer. Epoxy concrete overlay materials shall not be placed when weather or surface conditions are such that the material cannot be properly handled, placed, spread and cured within the specified requirements of traffic control.

The epoxy overlay shall be applied in two separate courses (two coat overlay only) in accordance with the following rate of application: and the total of the two applications (two coat only) shall not be less than 7.5 gals. per 100 sq. ft.

Course	Rate Gal./100 Sq. Ft.	Aggregate Lbs./Sq. Yd*	
1 (one coat system)	No less than 2.5	10+	
2 (two coat system)	No less than 5.0	14+	

^{*}Application of aggregate shall be of sufficient quantity to completely cover the epoxy.

After the epoxy mixture has been prepared for the epoxy concrete overlay, it shall be immediately and uniformly applied to the surface of the bridge deck with a squeegee. The temperature of the bridge deck surface and all epoxy and aggregate components shall be 55°F or above at the time of application. Epoxy shall not be applied if the air temperature is expected to drop below 55°F

within 8 hours after application, or when high temperatures would cause the gel time to be less than 10 minutes. The dry aggregate shall be applied in such a manner as to cover the epoxy mixture completely within 5 minutes. Fist course applications that do not receive enough aggregate prior to gel shall be removed and replaced. Any second (two coat system only) course insufficiently covered with aggregate may be left in place, but will require additional applications before opening to traffic. Each course of epoxy concrete overlay shall be cured until vacuuming or brooming can be performed without tearing or damaging the surface. Traffic or equipment shall not be permitted on the overlay surface during the curing period. After the course one curing period (two coat system only), all loose aggregate shall be removed by vacuuming or brooming and the next overlay course applied to completion. The minimum curing periods shall be as follows:

Course: Average temperature of deck, epoxy and aggregate components in °F

	<u>60-64</u>	<u>65-69</u>	<u>70-74</u>	<u>75-79</u>	<u>80-84</u>	<u>85+</u>
1 (two coat system only)	4 hrs.	3 hrs.	2.5 hrs.	2 hrs.	1.5 hrs.	1 hr.
2 (one and two coat system)	6.5 hrs.*	5 hrs.	4 hrs.	3 hrs.	3 hrs.	3 hrs.

^{*}Course 2 shall be cured for 8 hrs. if the air temperature drops below 60°F during the curing period.

The Contractor shall plan and prosecute the work to provide the curing periods as specified herein, or other longer minimum curing periods as prescribed by the manufacturer prior to opening to public or construction traffic, unless otherwise permitted. When two coat system overlay is used the course one application shall not be opened to traffic.

Do not apply epoxy concrete overlay courses over modular joints, metal expansion joints, or evazote joint seals.

In the event the Contractor's operation damages or mars the epoxy concrete overlay, the Contractor shall remove the damaged areas by saw-cutting in rectangular sections to the top of the concrete deck surface and replacing the various courses in accordance with this Specification at no additional cost to the Department.

Measurement and Payment

Placement of Epoxy Overlay will be measured and paid for in square feet, which price shall be full compensation for deck preparation, pre-treatment, furnishing and placing either one or two coat overlay system, providing a 5 year (two coat system) and 1 year (one coat system) guarantee, and all tools, labor, materials, maintenance and incidentals necessary to complete the work. Payments shall be made under:

Placement of One Coat Epoxy O	verlay	Gallons
Placement of Two Coat Epoxy O	Overlay	Gallons

STANDARD SPECIAL PROVISION

<u>AVAILABILITY OF FUNDS – TERMINATION OF CONTRACTS</u>

Z-2

(5-20-08)

General Statute 143C-6-11. (h) Highway Appropriation is hereby incorporated verbatim in this contract as follows:

(h) Amounts Encumbered. - Transportation project appropriations may be encumbered in the amount of allotments made to the Department of Transportation by the Director for the estimated payments for transportation project contract work to be performed in the appropriation fiscal year. The allotments shall be multiyear allotments and shall be based on estimated revenues and shall be subject to the maximum contract authority contained in General Statute 143C-6-11©. Payment for transportation project work performed pursuant to contract in any fiscal year other than the current fiscal year is subject to appropriations by the General Assembly. Transportation project contracts shall contain a schedule of estimated completion progress, and any acceleration of this progress shall be subject to the approval of the Department of Transportation provided funds are available. The State reserves the right to terminate or suspend any transportation project contract, and any transportation project contract shall be so terminated or suspended if funds will not be available for payment of the work to be performed during that fiscal year pursuant to the contract. In the event of termination of any contract, the contractor shall be given a written notice of termination at least 60 days before completion of scheduled work for which funds are available. In the event of termination, the contractor shall be paid for the work already performed in accordance with the contract specifications.

Payment will be made on any contract terminated pursuant to the special provision in accordance with Article 108-13(E), of the *North Carolina Department of Transportation Standard Specifications for Roads and Structures*, dated July 1, 2006.

STANDARD SPECIAL PROVISION

ERRATA

(7-21-09) Z-4

Revise the Standard Specifications for Roads and Structures July 2006 on all projects as follows:

Division 1

- Page 1-1, replace AREA American Railway Engineering Association with American Railway Engineering and Maintenance of Way Association.
- Page 1-7, remove -L- in middle of page after INVITATION TO BID and before LABORATORY.
- Page 1-25, 102-16(R), move 2nd paragraph to left margin. It is not a part of this subarticle, but part of the entire article.

Division 2

- Page 2-9, Subarticle 225-1(C), 1st paragraph, 2nd line, last word, add a "d" to make the word grade become *graded*.
- Page 2-15, Subarticle 226-3, 5th paragraph, first line, replace the word in with the word is.
- Page 2-23, Subarticle 235-4(B)(9), at the end of the sentence, replace finished greater with finished grade.
- Page 2-28, Article 260-3, First paragraph, second line, remove the word *foot*.

Division 3

Page 3-13, Article 340-4, Second paragraph, change Flowable Backfill to Flowable Fill

Division 4

- Page 4-29, Article 420-13(A) Description, change reference from Section 1082 to Article 1081-6.
- Page 4-40 Subarticle 420-17(F) first line, change Subarticle 420-17(B) to (B) herein.
- Page 4-70, Article 442-13(B) Second sentence, change SSPC Guide 6I to SSPC Guide 6.
- Pages 4-72, 4-74, 4-76, at the top of the page, substitute the heading Section 452 with Section 450.
- Page 4-79, at the top of the page, substitute the heading Section 450 with Section 452
- Page 4-80, change 452-7 to 452-6 at the top of the page.
- Page 4-80, change Pay Item ___Steel Pile Retaining Walls, to *Sheet* Pile Retaining Walls.
- Page 4-88, 462-4, Title, Replace last word Measurement with the word *PAYMENT*

Division 5

- Page 5-8, Article 501-15 Measurement and Payment, delete the 4th paragraph that begins The quantity of lime, measured as provided ...
- Page 5-14, Article 520-11 Measurement and Payment, first paragraph, second line, delete will be.

Division 6

Page 6-3, Article 600-9, 2nd Paragraph on this page, replace 818-5 with 818-4.

Pages 6-30 and 31, Subarticle 610-3(A)(13) Move 2 paragraphs from the margin to the right under the number (13).

Page 6-43, Article 610-8, 4th paragraph, remove the first the

Page 6-44, 2nd full paragraph, 1st sentence, delete the first *and* and add *transverse* just before cross-slope control.

Page 6-51, at the top of the page, add 610-14 on the same line, and just before the heading MAINTENANCE.

Page 6-53, Article 620-4 sixth paragraph, second line; the word that should be *which*.

Page 6-66, title, Replace EXISTNG with EXISTING

Page 6-66, Article 657-1, Description, first sentence, replace PS/AR (hot-poured rubber asphalt with *hot applied joint sealer*.

Page 6-66, Article 657-2, replace PS/AR (Hot-Poured Rubber Asphalt with the following:

ItemSectionHot Applied Joint Sealer1028-2

Page 6-67, at the top of the page, substitute the heading Section 654 with Section 657.

Page 6-67, Article 657-3 Construction Methods, 2nd paragraph, replace PS/AR sealant with *hot applied joint sealer*.

Page 6-71, 660-9(B)(1), Replace the first sentence of the first paragraph with the following:

Using the quantities shown in *Table 660-1*, apply asphalt material to the existing surface followed by an application of No. 78 M or lightweight aggregate.

Page 6-89; Add a period at the end of the last sentence at the bottom of the page.

Page 6-90, Article 663-5, first paragraph, first sentence, change 50oF to $50^{\circ}F$; third paragraph, fourth sentence change 325oF to $325^{\circ}F$.

Division 7

Page 7-12, at the top of the page, substitute the heading Section 710 with Section 700.

Page 7-15, Article 710-9, 4th paragraph, last line, change 710-11(B) to 710-10(B).

Division 8

Page 8-13, Article 808-3, 4th Paragraph, third line, replace Eexcavation with Excavation

Page 8-35, Article 848-2, Item: Replace Concrete with Concrete

Division 9

Page 9-2, add 901-3 just before CONSTRUCTION METHODS

Division 10

Page 10-12, near bottom of page add (C) before Proportioning and Mixing of Modified Compositions, which should be bold type.

Page 10-28, at the top of the page, substitute Section 1006 for 1005.

Page 10-54, Subarticle 1018-2A), First line, substitute (B) for II, third line, substitute (B)(2) for II-b.

Pages 10-56, 10-58, 10-60 at the top of the page, substitute Section 1018 with Section 1020.

Page 10-84, Table 1042-1, Class 2, Maximum, change from 23r to 23.

Page 10-84, Article 1042-2 Testing, last sentence, replace the word alterations with the word cycles.

Page 10-100, Table 1056-1, replace on the line for Trapezoidal Tear Strength:

Type 1	Type 2	Typ	ne 3	Type 4
		Class A	Class B	Soil Stabilization
45 lb	<i>75</i> lb			<i>75</i> lb

Page 10-116, Subarticle 1070-10, first paragraph, second sentence, add or just before cold-forged sleeve.

Pages 10-136 through 10-147, at the top of the page, substitute Section 1074 with Section 1072.

Page 10-157, Article 1077-11, first paragraph, change the reference from Subarticle 420-18(B) to Subarticle 420-17(B).

Page 10-200, Subarticle 1080-14(B), change reference to ASTM D3359

Page 10-211, at the top of the page, substitute Section 1081 with Section 1082.

Page 10-229, add 1088-6 BLANK on the line above 1088-7 TUBULAR MARKERS.

Page 10-244, add **1089-10** *BLANK* and **1089-11** *BLANK* on the lines just above 1089-12 FLAGGER.

Page 10-272, delete Article 1098-6 in its entirety. Renumber Articles 1098-7 through 1098-17 as Articles 1098-6 through 1098-16 consecutively.

Division 12

Page 12-21 Add 1266-2 just before the heading MATERIALS.

Division 14

Page 14-33, Article 1413-6, first paragraph, first sentence, first line, replace made with paid for.

Division 15

- □ Page 15-2 add 1500-4 just before the heading WEEKEND, NIGHT AND HOLIDAY WORK.
- □ Page 15-4, Subarticle 1505-3(A)(2), replace the 2nd line with the following: *Provide shielding or shoring as required under Section 150 or as required elsewhere in the contract.*
- □ Page 15-5, add *1505-6* on the same line and just before the heading MEASUREMENT AND PAYMENT. (Remove the period after PAYMENT.)
- □ Page 15-6, Article 1505-6(3), delete in Section 1175 and replace it with elsewhere in the contract.
- □ Page 15-8, add **1510-4** on the same line and just before the heading MEASUREMENT AND PAYMENT.
- □ Page 15-10, substitute **BLANK** for CONSTRUCTION REQUIREMENTS on the same line and just before 1515-4.
- □ Page 15-10, substitute **CONSTRUCTION REQUIREMENTS** for General Requirements
- Page 15-10, Article 1515-4, add (D) just before the bolded Fire Hydrants.
- □ Page 15-13, Article 1520-3, 8th paragraph, add *pipe* after diameter.
- □ Page 15-22, add *1540-3* on the same line and just before the heading CONSTRUCTION REQUIREMENTS.
- □ Page 15-28, Replace 1550-6 METHOD OF MEASUREMENT with *MEASUREMENT AND PAYMENT*.

Division 16

□ Page 16-12, Subarticle 1632-1(C) ¼ Inch hardware cloth, change the minimum width from 24 inches to 48 inches.

END

STANDARD SPECIAL PROVISION

PLANT AND PEST QUARANTINES

(Imported Fire Ant, Gypsy Moth, Witchweed, And Other Noxious Weeds)

(3-18-03)

Z-04a

Within quarantined area

This project may be within a county regulated for plant and/or pests. If the project or any part of the Contractor's operations is located within a quarantined area, thoroughly clean all equipment prior to moving out of the quarantined area. Comply with federal/state regulations by obtaining a certificate or limited permit for any regulated article moving from the quarantined area.

Originating in a quarantined county

Obtain a certificate or limited permit issued by the N.C. Department of Agriculture/United States Department of Agriculture. Have the certificate or limited permit accompany the article when it arrives at the project site.

Contact

Contact the N.C. Department of Agriculture/United States Department of Agriculture at 1-800-206-9333, 919-733-6932, or *http://www.ncagr.com/plantind/* to determine those specific project sites located in the quarantined area or for any regulated article used on this project originating in a quarantined county.

Regulated Articles Include

- 1. Soil, sand, gravel, compost, peat, humus, muck, and decomposed manure, separately or with other articles. This includes movement of articles listed above that may be associated with cut/waste, ditch pulling, and shoulder cutting.
- 2. Plants with roots including grass sod.
- 3. Plant crowns and roots.
- 4. Bulbs, corms, rhizomes, and tubers of ornamental plants.
- 5. Hay, straw, fodder, and plant litter of any kind.
- 6. Clearing and grubbing debris.
- 7. Used agricultural cultivating and harvesting equipment.
- 8. Used earth-moving equipment.
- 9. Any other products, articles, or means of conveyance, of any character, if determined by an inspector to present a hazard of spreading imported fire ant, gypsy moth, witchweed or other noxious weeds.

STANDARD SPECIAL PROVISION

MINIMUM WAGES

(7-21-09) Z-5

FEDERAL: The Fair Labor Standards Act provides that with certain exceptions every employer shall

pay wages at the rate of not less than SEVEN DOLLARS AND TWENTY FIVE CENTS

(\$7.25) per hour.

STATE: The North Carolina Minimum Wage Act provides that every employer shall pay to each of his employees, wages at a rate of not less than SEVEN DOLLARS AND TWENTY

FIVE CENTS (\$7.25) per hour.

The minimum wage paid to all skilled labor employed on this contract shall be SEVEN

DOLLARS AND TWENTY FIVE CENTS (\$7.25) per hour.

The minimum wage paid to all intermediate labor employed on this contract shall be

SEVEN DOLLARS AND TWENTY FIVE CENTS (\$7.25) per hour.

The minimum wage paid to all unskilled labor on this contract shall be SEVEN

DOLLARS AND TWENTY FIVE CENTS (\$7.25) per hour.

This determination of the intent of the application of this act to the contract on this

project is the responsibility of the Contractor.

The Contractor shall have no claim against the Department of Transportation for any changes in the minimum wage laws, Federal or State. It is the responsibility of the Contractor to keep fully informed of all Federal and State Laws affecting his contract.

AWARD LIMITS ON MULTIPLE PROJECTS

It is the desire of the Proposer to be awarded cor \$	ntracts, the value of which will not exceed a total of, for those projects indicated below
	e as shown in the Proposal Form. Individual projects and county in the appropriate place below. Projects not
(Project Number)	(County)
*If a Proposer desires to limit the total amostate such limit in the space provided above	ount of work awarded to him in this letting, he shall in the second line of this form.
total value of which is more that the above will award me (us) projects from among the	are) the successful bidder on indicated projects, the stipulated award limits, the Board of Transportation ose indicated which have a total value not exceeding test advantage to the Department of Transportation.
	**Signature of Authorized Person

^{**}Only those persons authorized to sign bids under the provisions of Article 102-8, Item 7, shall be authorized to sign this form.

OSULISIINGO	F MBE	& WBE	OF MBE & WBE SUBCONTRACTORS	ORS	
				Sheet	of
FIRM NAME AND ADDRESS	MBE or WBE	ITEM NO.	ITEM DESCRIPTION	* AGREED UPON UNIT PRICE	** DOLLAR VOLUME OF ITEM
Contract No.		County		Firm	

This form must be completed in order for the Bid to be considered responsive and be publicly read. Bidders with no MBE and/or WBE participation must so indicate this on the form by entering the word or number zero.

								i			
of	** DOLLAR VOLUME OF ITEM							\$	%	8	%
JRS Sheet	* AGREED UPON UNIT PRICE							BE Subcontractor	Contract Bid Price	BE Subcontractor	Contract Bid Price
LISTING OF MBE & WBE SUBCONTRACTORS	ITEM DESCRIPTION							** Dollar Volume of MBE Subcontractor	MBE Percentage of Total Contract Bid Price	** Dollar Volume of WBE Subcontractor \$	WBE Percentage of Total Contract Bid Price
& WBE	ITEM NO.							al Price	r WBE	ne the ct.	
F MBI	MBE or WBE							the Actus	BE and/o	odetermi the contra	
CISTING O	FIRM NAME AND ADDRESS							* The Dollar Volume shown in this column shall be the Actual Price	Agreed Upon by the Prime Contractor and the MBE and/or WBE	subcontractor, and these prices will be used to determine the percentage of the MBE and/or WBE participation in the contract.	

This form must be completed in order for the Bid to be considered responsive and be publicly read. Bidders with no MBE and/or WBE participation must so indicate this on the form by entering the word or number zero.

** Must have entry even if figure to be entered is zero.

EXECUTION OF BID NON-COLLUSION AFFIDAVIT, DEBARMENT CERTIFICATION AND GIFT BAN CERTIFICATION

CORPORATION

The person executing the bid, on behalf of the Bidder, being duly sworn, solemnly swears (or affirms) that neither he, nor any official, agent or employee of the bidder has entered into any agreement, participated in any collusion, or otherwise taken any action which is in restraint of free competitive bidding in connection with any bid or contract, and that the Bidder intends to do the work with its own bonafide employees or subcontractors and is not bidding for the benefit of another contractor.

In addition, execution of this bid in the proper manner also constitutes the Bidder's certification of status under penalty of perjury under the laws of the United States in accordance with the Debarment Certification attached, provided that the Debarment Certification also includes any required statements concerning exceptions that are applicable.

N.C.G.S. § 133-32 and Executive Order 24 prohibit the offer to, or acceptance by, any State Employee of any gift from anyone with a contract with the State, or from any person seeking to do business with the State. By execution of any response in this procurement, you attest, for your entire organization and its employees or agents, that you are not aware that any such gift has been offered, accepted, or promised by any employees of your organization.

P. 11	
Full nan	me of Corporation
Address	ss as prequalified
Addres	ss as prequamed
Attest Secretary/Assistant Secretary	By President/Vice President/Assistant Vice President
Secretary/Assistant Secretary Select appropriate title	Select appropriate title
	11 1
	<u></u>
Print or type Signer's name	Print or type Signer's name
	CORPORATE SEAL
AFFIDAVIT M	IUST BE NOTARIZED
	NOTA DV CDAY
Subscribed and sworn to before me this the	NOTARY SEAL
1 6	
day of, 20	
Signature of Notary Public	
OfCounty	
State of	
<u> </u>	
My Commission Expires	

My Commission Expires:_____

EXECUTION OF BID NON-COLLUSION AFFIDAVIT, DEBARMENT CERTIFICATION AND GIFT BAN CERTIFICATION

PARTNERSHIP

The person executing the bid, on behalf of the Bidder, being duly sworn, solemnly swears (or affirms) that neither he, nor any official, agent or employee of the bidder has entered into any agreement, participated in any collusion, or otherwise taken any action which is in restraint of free competitive bidding in connection with any bid or contract, and that the Bidder intends to do the work with its own bonafide employees or subcontractors and is not bidding for the benefit of another contractor.

In addition, execution of this bid in the proper manner also constitutes the Bidder's certification of status under penalty of perjury under the laws of the United States in accordance with the Debarment Certification attached, provided that the Debarment Certification also includes any required statements concerning exceptions that are applicable.

N.C.G.S. § 133-32 and Executive Order 24 prohibit the offer to, or acceptance by, any State Employee of any gift from anyone with a contract with the State, or from any person seeking to do business with the State. By execution of any response in this procurement, you attest, for your entire organization and its employees or agents, that you are not aware that any such gift has been offered, accepted, or promised by any employees of your organization.

Full Name of Partnership					
Address as Prequalified					
	By				
Signature of Witness	-	Signature of Partner			
	- -				
Print or type Signer's name		Print or type Signer's name			
AFFIDAVIT MU	ST BE	NOTARIZED			
Subscribed and sworn to before me this the					
day of20		NOTA DV CE A I			
		NOTARY SEAL			
Signature of Notary Public	_				
ofCounty					
State of					

My Commission Expires:_____

EXECUTION OF BID NON-COLLUSION AFFIDAVIT, DEBARMENT CERTIFICATION AND GIFT BAN CERTIFICATION

LIMITED LIABILITY COMPANY

The person executing the bid, on behalf of the Bidder, being duly sworn, solemnly swears (or affirms) that neither he, nor any official, agent or employee of the bidder has entered into any agreement, participated in any collusion, or otherwise taken any action which is in restraint of free competitive bidding in connection with any bid or contract, and that the Bidder intends to do the work with its own bonafide employees or subcontractors and is not bidding for the benefit of another contractor.

In addition, execution of this bid in the proper manner also constitutes the Bidder's certification of status under penalty of perjury under the laws of the United States in accordance with the Debarment Certification attached, provided that the Debarment Certification also includes any required statements concerning exceptions that are applicable.

N.C.G.S. § 133-32 and Executive Order 24 prohibit the offer to, or acceptance by, any State Employee of any gift from anyone with a contract with the State, or from any person seeking to do business with the State. By execution of any response in this procurement, you attest, for your entire organization and its employees or agents, that you are not aware that any such gift has been offered, accepted, or promised by any employees of your organization.

	Full Name of Firm	
	Address as Prequalified	
	63.4	
	Signature of Manager	
Signature of Witness		Individually
Print or type Signer's name	-	Print or type Signer's Name
Time of type Signer's name		Time of type Signer's Name
A EFIDA I	VIT MUST BE NOTA	DIZED
AFFIDA	VII MUSI DE NOTA	KIZED
Subscribed and sworn to before me this th	10	NOTARY SEAL
Subscribed and sworn to before the this ti		
day of 2	20	
day of	.··	
Signature of Notary Public		
digitative of I totally I dolle		
ofCou	inty	
	•	
State of		
		

EXECUTION OF BID NON-COLLUSION AFFIDAVIT, DEBARMENT CERTIFICATION AND GIFT BAN CERTIFICATION **JOINT VENTURE (2) or (3)**

The person executing the bid, on behalf of the Bidder, being duly sworn, solemnly swears (or affirms) that neither he, nor any official, agent or employee of the bidder has entered into any agreement, participated in any collusion, or otherwise taken any action which is in restraint of free competitive bidding in connection with any bid or contract, and that the Bidder intends to do the work with its own bonafide employees or subcontractors and is not bidding for the benefit of another contractor.

In addition, execution of this bid in the proper manner also constitutes the Bidder's certification of status under penalty of perjury under the laws of the United States in accordance with the Debarment Certification attached, provided that the Debarment Certification also includes any required statements concerning exceptions that are applicable.

N.C.G.S. § 133-32 and Executive Order 24 prohibit the offer to, or acceptance by, any State Employee of any gift from anyone with a contract with the State, or from any person seeking to do business with the State. By execution of any response in this procurement, you attest, for your entire organization and its employees or agents, that you are not aware that any such gift has been offered, accepted, or promised by any employees of your organization.

SIGNATURE OF CONTRACTOR

Instructions: 2 Joint Venturers Fill in lines (1), (2) and (3) and execute. 3 Joint Venturers Fill in lines (1), (2), (3) and (4) and execute. On Line (1), fill in the name of the Joint Venture Company. On Line (2), fill in the name of one of the joint venturers and execute below in the appropriate manner. On Line (3), print or type the name of the other joint venturer and execute below in the appropriate manner. On Line (4), fill in the name of the third joint venturer, if applicable and execute below in the appropriate manner.

(1)				
(2)		Name of Joint Venture		
. ,		Name of Contractor		
		Address as prequalified	l	,
	Signature of Witness or Attest	Ву		Signature of Contractor
	Print or type Signer's name			Print or type Signer's name
	If Corporation, affix Corporate Seal	and		
(3)				
		Name of Contractor		
		Address as prequalified	ļ	
	Signature of Witness or Attest	Ву		Signature of Contractor
	Print or type Signer's name			Print or type Signer's name
	If Corporation, affix Corporate Seal	and		
(4)		Name of Contractor (for 3 Joint Ve	enture only)	
		Address as prequalified	l	
	Signature of Witness or Attest	Ву		Signature of Contractor
	Print or type Signer's name			Print or type Signer's name
	If Corporation, affix Corporate Seal			
RYSEA		NOTARY SEAL		NOTARY
	t be notarized for Line (2)	Affidavit must be notarized for Li	. ,	Affidavit must be notarized for Line (4)
	nd sworn to before me this 20	Subscribed and sworn to before n		Subscribed and sworn to before me thisday of 20
	Notary Public	Signature of Notary Public		Signature of Notary Public
	County	of	County	ofCou
		State of		State of
ammicei	ion Evniras:	My Commission Evnirge		My Commission Hypires:

EXECUTION OF BID NON-COLLUSION AFFIDAVIT, DEBARMENT CERTIFICATION AND GIFT BAN CERTIFICATION

INDIVIDUAL DOING BUSINESS UNDER A FIRM NAME

The person executing the bid, on behalf of the Bidder, being duly sworn, solemnly swears (or affirms) that neither he, nor any official, agent or employee of the bidder has entered into any agreement, participated in any collusion, or otherwise taken any action which is in restraint of free competitive bidding in connection with any bid or contract, and that the Bidder intends to do the work with its own bonafide employees or subcontractors and is not bidding for the benefit of another contractor.

In addition, execution of this bid in the proper manner also constitutes the Bidder's certification of status under penalty of perjury under the laws of the United States in accordance with the Debarment Certification attached, provided that the Debarment Certification also includes any required statements concerning exceptions that are applicable.

N.C.G.S. § 133-32 and Executive Order 24 prohibit the offer to, or acceptance by, any State Employee of any gift from anyone with a contract with the State, or from any person seeking to do business with the State. By execution of any response in this procurement, you attest, for your entire organization and its employees or agents, that you are not aware that any such gift has been offered, accepted, or promised by any employees of your organization.

Name of Contractor					
	-	Individual name			
Trading and doing business as					
		Full name of Firm			
	Address as Pre	qualified			
Signature of Witness		Signature of Contractor, Individually			
Print or type Signer's name		Print or type Signer's name			
AFFIDA	AVIT MUST I	BE NOTARIZED			
Subscribed and sworn to before me this	the	NOTARY SEAL			
day of	20				
Signature of Notary Public					
ofCc	•				
State of					
My Commission Expires:					

EXECUTION OF BID NON-COLLUSION AFFIDAVIT, DEBARMENT CERTIFICATION AND GIFT BAN CERTIFICATION

INDIVIDUAL DOING BUSINESS IN HIS OWN NAME

The person executing the bid, on behalf of the Bidder, being duly sworn, solemnly swears (or affirms) that neither he, nor any official, agent or employee of the bidder has entered into any agreement, participated in any collusion, or otherwise taken any action which is in restraint of free competitive bidding in connection with any bid or contract, and that the Bidder intends to do the work with its own bonafide employees or subcontractors and is not bidding for the benefit of another contractor.

In addition, execution of this bid in the proper manner also constitutes the Bidder's certification of status under penalty of perjury under the laws of the United States in accordance with the Debarment Certification attached, provided that the Debarment Certification also includes any required statements concerning exceptions that are applicable.

N.C.G.S. § 133-32 and Executive Order 24 prohibit the offer to, or acceptance by, any State Employee of any gift from anyone with a contract with the State, or from any person seeking to do business with the State. By execution of any response in this procurement, you attest, for your entire organization and its employees or agents, that you are not aware that any such gift has been offered, accepted, or promised by any employees of your organization.

SIGNATURE OF CONTRACTOR

Name of Contractor Print or type Individual name Address as Prequalified Signature of Contractor, Individually Print or type Signer's Name Signature of Witness Print or type Signer's name AFFIDAVIT MUST BE NOTARIZED Subscribed and sworn to before me this the **NOTARY SEAL** day of 20. Signature of Notary Public of _____ County

State of _____

My Commission Expires:_____

DEBARMENT CERTIFICATION

Conditions for certification:

- 1. The prequalified bidder shall provide immediate written notice to the Department if at any time the bidder learns that his certification was erroneous when he submitted his debarment certification or explanation that is file with the Department, or has become erroneous because of changed circumstances.
- 2. The terms covered transaction, debarred, suspended, ineligible, lower tier covered transaction, participant, person, primary covered transaction, principal, proposal, and voluntarily excluded, as used in this provision, have the meanings set out in the Definitions and Coverage sections of the rules implementing Executive Order 12549. A copy of the Federal Rules requiring this certification and detailing the definitions and coverages may be obtained from the Contract Officer of the Department.
- 3. The prequalified bidder agrees by submitting this form, that he will not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in NCDOT contracts, unless authorized by the Department.
- 4. For Federal Aid projects, the prequalified bidder further agrees that by submitting this form he will include the Federal-Aid Provision titled *Required Contract Provisions Federal-Aid Construction Contract (Form FHWA PR* 1273) provided by the Department, without subsequent modification, in all lower tier covered transactions.
- 5. The prequalified bidder may rely upon a certification of a participant in a lower tier covered transaction that he is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless he knows that the certification is erroneous. The bidder may decide the method and frequency by which he will determine the eligibility of his subcontractors.
- 6. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this provision. The knowledge and information of a participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
- 7. Except as authorized in paragraph 6 herein, the Department may terminate any contract if the bidder knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available by the Federal Government.

Rev. 11-5-09

DEBARMENT CERTIFICATION

The prequalified bidder certifies to the best of his knowledge and belief, that he and his principals:

- a. Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;
- b. Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records; making false statements; or receiving stolen property;
- c. Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph b. of this certification; and
- d. Have not within a three-year period preceding this proposal had one or more public transactions (Federal, State or local) terminated for cause or default.
- e. Will submit a revised Debarment Certification immediately if his status changes and will show in his bid proposal an explanation for the change in status.

If the prequalified bidder cannot certify that he is not debarred, he shall provide an explanation with this submittal. An explanation will not necessarily result in denial of participation in a contract.

Failure to submit a non-collusion affidavit and debarment certification will result in the prequalified bidder's bid being considered non-responsive.

Check here if an explanation is attached to this certification.

North Carolina Department of Transportation BID FORM

WBS ELEMENT: Various

COUNTIES: Beaufort, Carteret, Craven, Greene, Jones, Lenoir, Pamlico, Pitt

DESCRIPTION: Replacement/Repair of Bridge Expansion Joints and Foam Injections at

Various Bridge Sites

BID OPENING: Tuesday, March 9, 2010

ITEM	SECT	DESCRIPTION	QTY	UNIT	UNIT PRICE	AMOUNT BID
1	SP	MOBILIZATION	10	EA		
2	SP	SILICON JOINT REPLACEMENT	1,200	LF		
3	SP	EVAZOTE JOINT REPLACEMENT	1,200	LF		
4	SP	OPEN JOINT EVAZOTE PLACEMENT	1,200	LF		
5	SP	JOINT REPAIR USING ELASTOMERIC CONCRETE (LESS THAN 16" WIDE AND	400	LF		
		LESS THAN 2" DEEP)	400	LF		
6	SP	JOINT REPAIR USING ELASTOMERIC				
		CONCRETE (GREATER THAN 16" WIDE OR GREATER THAN 2" DEEP)	40	CF		
7	SP	ASPHALT JOINT REPAIR/ REPLACEMENT (18-24" WIDE, W/ PLATE)	300	LF		
8	SP	CONCRETE/ASPHALT DECK REPAIR (FIBRECRETE B OR EQUIVALENT)	15,000	LB		
9	SP	CONCRETE/ASPHALT DECK REPAIR (FIBRECRETE G OR EQUIVALENT)	15,000	LB		
10	SP	HBPF SLAB LEVELING, UNDERSEAL AND VOIDFILLING	6,000	LB		
11	SP	FOAM INSTALLATION, SOIL STABILIZATION	500	GAL		
12	SP	PLACEMENT OF ONE COAT EPOXY OVERLAY	40,000	SF		
13	SP	PLACEMENT OF TWO COAT EPOXY OVERLAY	60,000	SF		
14	SP	TEMPORARY LANE CLOSURE (2-LANE, 2-WAY ROADWAY)	30	EA		
15	SP	TEMPORARY LANE CLOSURE (MULTI- LANE ROADWAY)	30	EA		
16	SP	LANE CLOSURE SHIFT (MULTI-LANE ROADWAY)	40	EA		
17	SP	NIGHTTIME TEMPORARY LANE CLOSURE (2-LANE, 2-WAY ROADWAY)	30	EA	_	
18	SP	NIGHTTIME TEMPORARY LANE CLOSURE (MULTI-LANE ROADWAY)	30	EA		
19	SP	NIGHTTIME LANE CLOSURE SHIFT (MULTI-LANE ROADWAY)	14	EA		

THE CONTRACTOR SHALL NOTE THAT THE CONTRACT QUANTITIES PROVIDED ARE USED SOLELY FOR DETERMINING THE LOWEST RESPONSIBLE BIDDER. NO MINIMUM AMOUNT OF WORK IS GUARANTEED UNDER THIS CONTRACT.

TOTAL BID FOR P	PROJECT:	
CONTRACTOR		
ADDRESS		
Federal Identification Number	Contractors License	Number
Authorized Agent	Title	
Signature		Date
Witness	Title	
Signature		Date
THIS SECTION TO BE CON This bid has been reviewed in acc Roads and Structures 2006.	MPLETED BY NC DEPARTMENT cordance with Article 103-1 of	
Reviewed by NCDOT	Contract Officer	Date
Accepted by NCDOT	Division Engineer	Date